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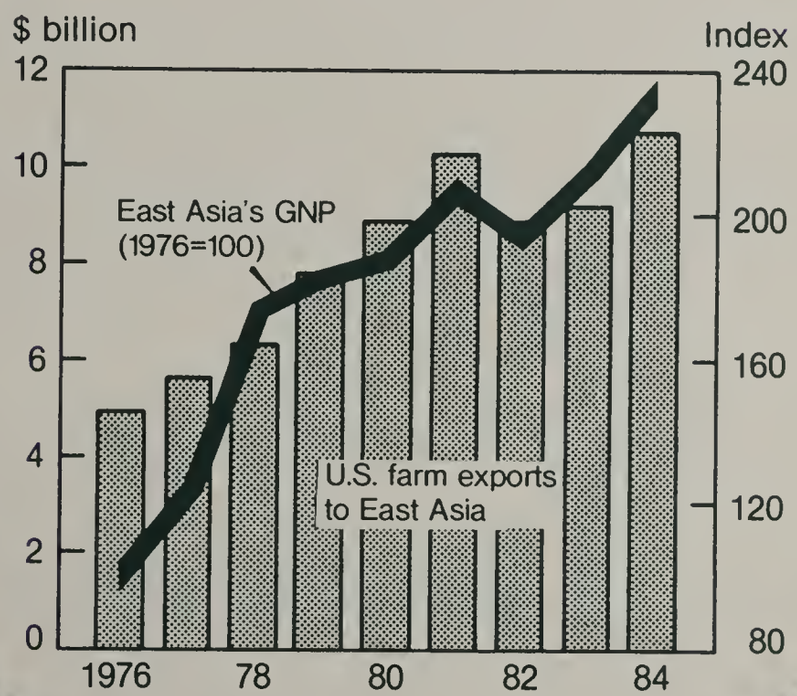
East Asia

Outlook and Situation Report

Economic growth drives U.S. farm exports



Contents

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Note: Tons are metric; dollars are U.S. dollars; and split years, e.g. 1982/83 are Oct.-Sept., unless specified otherwise.

Summary

Economies in the East Asian region will continue to expand in 1984. South Korea and Taiwan should see another strong year, with each growing about 7.5 percent, because of strengthening foreign demand. Hong Kong's economy, spurred by exports, could grow as much as 6.5 percent, but rising wages could keep inflation high. In Japan, real GNP is forecast to grow 4.1 percent, driven primarily by improved domestic demand.

Agricultural output in the region should rise modestly in 1984. If weather permits, output in Japan and South Korea should improve because of increased rice and livestock production. Growth in Taiwan's farm sector is projected to slow to about 1 percent because of reduced rice, sugarcane, and pork production.

East Asia continued to be a leading market for the United States, taking 27 percent of all U.S. agricultural exports in fiscal 1983. For fiscal 1984, total sales to the region are forecast to reach a record $10.7 billion, up 17 percent from last year. Most of the increase will come from larger U.S. exports of feed grains, soybeans, and cotton.

In 1983, all economies in the region experienced resurgent growth, led by South Korea's vigorous 9.3-percent expansion in GNP. Taiwan's and Hong Kong's economies, benefiting from improved world economic conditions, advanced 7.1 and 6.0 percent, respectively. Japan's economy, fueled by exports, recovered steadily. Inflation was low in the region, except in Hong Kong, where a currency devaluation pushed consumer prices up 11.2 percent. Export growth accounted for most of the region's economic gains, while improved domestic demand strengthened imports in all countries except Japan, where lower oil prices led to a reduced import bill.

Last year's agricultural output in the region grew only 2 percent, which is comparable with the previous 2 years, but remained far below the records of 1977 and 1978. With Taiwan trying to reduce rice production, and with Japan suffering another poor harvest, the region's rice output remained virtually unchanged for the fourth consecutive year. Meat production and consumption continued to rise, reflecting higher incomes and accompanying consumer demand for higher valued foods. Especially vigorous growth in Taiwan's pork sector stemmed largely from increased exports resulting from Japan's temporary ban on imports of Danish pork. Poultry production throughout the region continued to expand, although growth in Japan's poultry sector slowed.

For the rest of the decade, the outlook is for continued growth in U.S. farm exports to East Asia. High-value agricultural products (HVP's) have become increasingly important to East Asian agricultural imports. The United States has maintained its share of HVP exports to the region, despite competition from the European Community and neighboring Asian countries. The region's strong economic performance and limited indigenous capacity to produce meat, fruits, and other HVP's portend rising demand for imports during the 1980's, with increased trade potential for the United States.

According to preliminary results of ERS research, Japan, the largest single country market for U.S. farm products, will continue to import substantial amounts of food and feed grains through the 1980's. Japanese imports of U.S. coarse grains are projected to grow to 20 million tons by 1990, while imports of U.S. wheat will amount to 3 million tons. These projections are based upon trends in recent years, and upon certain assumptions about future Japanese population and income growth, agricultural policies, and world grain prices.

In South Korea, the continued rapid expansion of meat and milk production in response to consumer demand is projected to lead to strong growth in U.S. exports of feed grains and soybeans. U.S. exports of wheat and rice to South Korea will grow slowly because of stagnant per capita demand. Imports of raw cotton may decline, as growing protectionism in developed country markets and and competition from other exporters leads to sluggish or negative growth in South Korea's textile exports.

U.S. FARM EXPORTS TO EAST ASIA TO RISE IN FY 84

The East Asia market accounted for 27 percent of all U.S. agricultural exports in FY 83. Only Western Europe took a larger percentage. Three of the region's countries—Japan, Korea, and Taiwan—are among the 10 countries that purchase more than a billion dollars worth of U.S. farm goods annually. The forecast for FY 84 puts agricultural exports to the region at a record $10.7 billion (table 1).

The industrialized East Asian economies rely increasingly on imports to satisfy their growing demand for food and feed. Having limited land resources on which they have already achieved the highest yields in Asia for most domestically produced crops, their progress in increasing agricultural output has slowed considerably in recent years. Moreover, East Asian diets have gradually shifted away from rice and toward more meats and other high-value items.

Although the industrialized East Asian countries are diversifying their agricultural imports and buying more higher valued items, four products still dominate: Feed grains, soybeans, cotton, and wheat. During FY 83, they accounted for 68 percent of total U.S. agricultural sales to the region, and in FY 84 they are expected to account for 72 percent (table 2).

Feed Grains and Soybeans

Livestock expansion drives East Asia's increased feed grain and soybean demand. Since 1978, the region's production of poultry, beef, and pork has grown by 35 percent, 16 percent, and 14 percent, respectively. Pork still accounts for more than half the region's meat production, but poultry meat is gaining rapidly. In both the hog and poultry sectors, there is biological potential for rapid growth, the needed technology transfer is more manageable, and concentrate feeds, the primary source of nutrients, are readily available on the world market.

Wheat

Wheat, a relatively minor crop in East Asia, has historically not been nearly as important as rice in the average diet. However, with higher incomes, more diversified and convenient foods are sought, increasing wheat and wheat products' role in the diet. Expanding wheat imports contributed significantly to the increase in U.S. agricultural exports to the region during the past decade. Since 1981, U.S. wheat sales have declined slightly, but prospects are good for a moderate recovery in FY 84. Although per capita wheat consumption is expected to remain steady in Japan, the largest market in the region, demand is likely to rebound elsewhere.

Cotton

East Asian textile industries were instrumental to each country's economic expansion during their rapid growth periods. The United States supplied major portions of the increased cotton used. During FY 83, East Asian countries purchased 60 percent of total U.S. cotton exports, with Japan, Korea, and Taiwan being the top three markets in the world.

Table 1.—U.S. agricultural exports to East Asia, U.S. fiscal years

Country	FY 81	FY 82	FY 83	FY 84 forecast
		Million dollars		
Hong Kong	388	403	344	410
Japan	6,706	5,735	5,889	7,000
Korea	2,136	1,607	1,713	1,824
Taiwan	1,105	1,166	1,237	1,478
Total	10,335	8,911	9,183	10,712

[1]Sources: Bureau of the Census, U.S. Dept. of Commerce; ERS forecasts.

Table 2.—Selected U.S. agricultural exports to East Asia, U.S. fiscal years

Commodity and country	FY 83		FY 84 forecast	
	Quantity	Value	Quantity	Value
	1,000 tons	*Million dollars*	*1,000 tons*	*Million dollars*
Wheat & prod.				
Taiwan	609	105	700	116
Korea	1,844	301	2,060	349
Japan	3,389	579	3,400	571
Hong Kong	113	19	122	21
Total	5,955	1,004	6,282	1,057
Feed grains				
Taiwan	3,438	432	3,600	478
Korea	3,942	493	3,070	456
Japan	14,065	1,698	15,600	2,271
Hong Kong	—	—	—	—
Total	21,445	2,623	22,270	3,205
Soybeans				
Taiwan	1,403	336	1,300	410
Korea	701	170	730	230
Japan	4,679	1,127	4,600	1,449
Hong Kong	—	—	—	—
Total	6,783	1,633	6,630	2,089
Cotton				
Taiwan	77	96	100	160
Korea	277	392	272	415
Japan	297	462	392	659
Hong Kong	27	35	65	83
Total	678	985	829	1,317

— = None or negligible.

Sources: Bureau of the Census, U.S. Dept. of Commerce; ERS forecasts.

Prospects Bright For FY 84 Sales

East Asia's position as a leading market for U.S. farm products is expected to strengthen significantly in FY 84. Economic growth prospects are favorable in every country, and higher commodity prices are not expected to significantly reduce import volume. The economies of Japan, Taiwan, and Hong Kong are forecast to grow more rapidly than last year. In Korea, economic expansion may ease somewhat from the fast pace of 1983, but should still equal or exceed the rates of other countries in the region. The forecast $10.7-billion sales during FY 84 would represent a 17-percent expansion from FY 83 exports and would top the previous $10.3-billion record set in FY 81.

(Note: Table 3 appears on page 4.)

Table 4.—East Asia: Selected macroeconomic indicators for calendar 1983

Country	GDP (current)	Real GDP growth	Midyear population	Population growth	Inflation rate[1]	international reserves	Change in international reserves
	Million dollars	*Percent*	*Million*	*Percent*		*Million dollars*	
Japan	1,167,800	3.1	118.7	0.9	1.9	24,496	+5,300
Korea	75,090	9.3	39.6	1.6	1.7	6,910	−70
Taiwan	49,754	7.1	18.6	1.8	2.0	13,500	+1,223
Hong Kong	22,627	6.0	5.4	2.5	11.2	[2]30,000	−8,090

[1]Consumer price index. [2]Estimated.

Sources: Official country sources.

Table 5.—East Asia: Fiscal year, currency, and exchange rates, 1983

Country	Fiscal year	Currency	Average exchange rate per US$
Japan	Apr/Mar	Yen	238
Korea	Jan/Dec	Won	776
Taiwan	Jan/Dec	New Taiwan $	40
Hong Kong	Jan/Dec	Hong Kong $	[1]7.80

[1]End of year rate.

Sources: International Monetary Fund, official country sources.

Feed grains, soybeans, and cotton account for the bulk of this anticipated growth in the value of U.S. farm product exports (table 3). Higher prices, combined with a modest increase in the quantity of feed grains and a substantial increase in the volume of cotton shipped, contribute to the higher export value for these products. The increase for cotton is largely a recovery from its depressed FY 83 level. Although less soybeans will be exported, strong prices should lead to a substantial increase in value. Export values for each of the three products are expected to establish records for U.S. sales to East Asia. The quantity of wheat exported may set a record, but the value is expected to fall short of the FY 81 level.

Japan's Economic Planning Agency forecasts real growth of 4.1 percent in the year beginning April 1, 1984. Growth in domestic demand is expected to maintain or increase import volumes of U.S. corn, soybeans, wheat, and cotton during the year, even with sizable price increases. If this happens, Japan may be the first $7-billion country market for U.S. farm products in FY 84. U.S. corn and cotton export prospects seem particularly bright, with larger quantities being shipped at higher prices.

The remaining East Asian countries are forecast to record higher economic growth than Japan in FY 84, but are not expected to match Japan's increase in agricultural purchases. U.S. shipments of feed grains to Korea may fall nearly a million tons because of (1) a reduction in the country's recent oversupply of hogs, (2) expansion of feed imports from non-U.S. sources prompted by relatively higher U.S. corn prices, and (3) government pressure on feedmillers and alcohol producers to substitute 200,000 tons of locally produced barley for imported grains. Moreover, some of the increased U.S. wheat sales to Korea are likely to be channeled into feed. The anticipated decline in corn volume to Korea will more than offset slightly higher quantities to Taiwan and Hong Kong, as well as an expected increase in unit value. Taiwan feedmillers want to rebuild stocks and prefer higher quality U.S. corn, despite the increased availability of lower priced Thai corn.

U.S. cotton sales to Hong Kong, Taiwan, and Japan are forecast to jump substantially in both quantity and value. Hong Kong's textile industry is showing renewed vigor after slowing for 3 years. With reduced exportable surpluses in Pakistan and the USSR, U.S. cotton sales could more than double in FY 84. Taiwan's increased U.S. cotton purchases during FY 84 primarily reflect a resumption of the higher market share the United States has traditionally held. In Japan, increased U.S. sales primarily reflect reduced Soviet exports. [*E. Wayne Denney, (202) 447-8229*]

HONG KONG

Worldwide Recovery Aids Growth

Hong Kong's 6.0-percent real growth in 1983 far exceeded the previous year's meager 1.0 percent. Private consumption spending grew a real 9.5 percent, more than doubling the previous year's. The recovery was led by a rebound in merchandise exports, which expanded a robust 13 percent after a 3-percent decline the year before. This strong performance occurred despite Hong

Table 6.—East Asia: Total exports and imports, 1981-83

Country	Exports			Imports			Trade balance		
	1981	1982	1983	1981	1982	1983	1981	1982	1983
				Billion dollars					
Japan	149.5	137.7	145.4	129.6	119.6	113.8	+19.9	+18.1	+31.6
Korea	20.7	20.9	24.1	24.3	23.5	26.1	−3.6	−2.6	−2.0
Taiwan	22.6	22.2	25.1	21.2	18.9	20.3	+1.4	+3.3	+4.8
Hong Kong	18.8	18.2	20.6	21.3	20.4	22.5	−2.5	−2.2	−1.9

Sources: Official country sources.

Table 3.—U.S. agricultural exports to East Asia by country and commodity group

Commodity groups	Hong Kong				Japan			
	FY 81	FY 82	FY 83	FY 84*	FY 81	FY 82	FY 83	FY 84*
				1,000 tons				
Animals and animal products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Beef & veal	1	1	1	1	39	49	61	63
Pork	1	1	—	1	43	33	30	29
Poultry meat	22	27	26	26	63	56	66	65
Tallow—inedible	—	—	—	—	91	72	59	58
Cattle hds., whl. (1,000No.)	138	111	206	206	7,456	6,433	6,535	7,000
Other animal products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grains and preparations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wheat and products	114	119	113	122	3,415	3,318	3,389	3,400
Rice	—	—	—	—	1	—	2	1
Feed grains	—	—	—	—	15,575	13,348	14,065	15,600
Feeds & fodders, excl. olcke.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fruits & preparations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nuts & preparations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Vegetables & preparations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oilseeds & products	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oilcake & meal	—	—	—	—	156	52	35	30
Soybeans	—	—	—	—	3,849	4,280	4,679	4,600
Vegetable oils & waxes	4	7	7	7	66	103	58	52
Tobacco, unmanufactured	2	2	2	2	44	49	51	55
Cotton, ex. linters	43	60	27	65	248	361	297	392
				Million dollars				
Animals and animal products	53	57	54	53	900	856	890	900
Beef & veal	5	6	5	6	149	209	271	280
Pork	2	2	1	2	158	117	110	98
Poultry meat	24	28	25	25	81	68	90	100
Tallow — inedible	—	—	—	—	42	35	25	30
Cattle hds., whl.	3	3	5	6	255	208	220	259
Other animal products	19	18	18	14	215	219	174	133
Grains and preparations	23	22	21	22	3,082	2,159	2,293	2,842
Wheat and products	22	21	19	21	635	564	579	571
Rice	—	—	—	—	1	—	1	—
Feed grains	—	—	—	—	2,437	1,580	1,698	2,271
Feeds & fodders, excl. olcke.	18	15	12	13	129	127	143	145
Fruits & preparations	107	106	103	105	282	268	291	280
Nuts & preparations	4	4	4	4	53	57	59	60
Vegetables & preparations	28	30	30	32	146	175	128	175
Oilseeds & products	6	7	8	8	1,289	1,153	1,193	1,517
Oilcake & meal	—	—	—	—	46	12	8	8
Soybeans	—	—	—	—	1,181	1,063	1,127	1,449
Vegetable oils & waxes	5	7	7	7	45	58	39	41
Tobacco, unmanufactured	9	11	10	11	237	290	314	336
Cotton, ex. linters	74	77	35	83	477	534	462	659
Other	66	74	67	79	111	116	116	86
Total	388	403	344	410	6,706	5,735	5,889	7,000

NA = Not available.

* = Projected. — = Less than 500 tons or $50,000.

Sources: Bureau of the Census, U.S. Department of Commerce; ERS projections.

Kong's volatile currency and somber political discussions about its future prosperity and stability in light of the expiration of the British lease on the New Territories in 1997. While current treaties indicate that Great Britian has permanent ownership of the other two parts of the colony, Hong Kong and Kowloon, the sovereignty of these districts beyond 1997 is also a subject of negotiation. While the economic recovery was much stronger than expected, it would likely have been even stronger had it not been for the political uncertainty that made most manufacturers and businessmen reluctant to reinvest their export earnings in Hong Kong. Stock market volume plummeted before gaining ground near the end of the year, and property sales remained depressed.

The tense political environment and accompanying low investment rate sent the Hong Kong dollar plunging to a record low of 9.55 per U.S. dollar in August 1983. To stem the currency's fall and attendant inflation, the Government, in September 1983, fixed the value of newly issued Hong Kong dollars at a rate of 7.80 per U.S. dollar. With traders able to buy U.S. dollars and resell them higher in the market place, the Government succeeded in buttressing the demand for Hong Kong dollars, at least in the waning months of 1983 and early 1984. Because of the 11-percent devaluation, the price of imported goods shot up, pushing the inflation rate to 11.2 percent. The Government's campaign to support the Hong Kong dollar focused on raising and lowering the

Table 3.—U.S. agricultural exports to East Asia by country and commodity group—Continued

South Korea, Rep.				Taiwan				Total			
FY 81	FY 82	FY 83	FY 84*	FY 81	FY 82	FY 83	FY 84*	FY 81	FY 82	FY 83	FY 84*
						1,000 tons					
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1	1	1	1	1	1	2	3	42	42	65	68
—	—	—	—	—	—	—	—	44	34	30	30
—	—	—	—	—	—	—	—	85	83	92	91
93	70	70	56	32	37	37	40	216	169	166	154
3,483	4,213	4,507	5,850	1,197	1,634	2,185	2,500	12,274	12,391	13,433	15,556
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,060	1,930	1,844	2,060	605	663	609	700	6,194	6,030	5,955	6,282
1,173	293	246	—	—	—	—	—	1,174	293	248	1
2,378	3,113	3,942	3,070	2,124	2,355	3,438	3,600	20,077	18,816	21,445	22,270
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
17	64	80	100	—	—	—	—	173	116	115	130
467	552	701	730	1,043	1,050	1,403	1,300	5,359	5,882	6,783	6,630
5	6	5	4	1	5	7	9	76	121	77	72
4	1	—	—	6	10	9	10	56	62	62	67
276	322	277	272	72	176	77	100	639	919	678	829
						Million dollars					
200	199	245	308	73	87	110	125	1,226	1,199	1,299	1,386
4	4	4	4	3	5	6	14	161	224	286	304
1	—	—	—	—	—	—	—	161	119	111	100
—	—	—	1	—	—	—	—	105	96	115	126
41	26	30	18	14	15	13	19	97	76	68	67
115	132	152	204	40	51	75	89	413	394	452	558
39	37	59	81	16	16	16	3	289	290	267	231
1,240	772	859	811	450	429	538	595	4,795	3,382	3,711	4,270
367	310	301	349	115	116	105	116	1,139	1,011	1,004	1,057
506	83	61	—	—	—	—	—	507	83	62	—
365	376	493	456	332	313	432	478	3,134	2,269	2,623	3,205
—	1	2	3	32	23	23	30	179	166	180	191
7	11	7	8	53	33	45	50	449	418	446	443
—	1	1	1	3	4	5	6	60	66	69	71
5	3	4	5	10	9	8	10	189	217	170	222
156	162	195	260	323	292	346	430	1,774	1,614	1,742	2,215
4	15	17	24	—	—	—	—	50	27	25	32
145	139	170	230	320	284	336	410	1,646	1,486	1,633	2,089
6	6	6	6	2	6	7	15	58	77	59	69
36	8	—	—	6	10	9	10	288	319	333	357
481	442	392	415	110	214	96	160	1,142	1,267	985	1,317
11	8	8	13	45	65	57	62	233	263	248	240
2,136	1,607	1,713	1,824	1,105	1,166	1,237	1,478	10,335	8,911	9,183	10,712

prime lending rate depending on market conditions for the local currency. The prime rate at midyear, for example, was raised from 10.5 to 16 percent. The Government also lifted the 10-percent withholding tax on Hong Kong dollar bank deposits. By yearend, the prime rate stood at 15 percent, but a buildup in local currency deposits, because of weak loan demand and a stabilizing currency, encouraged the Hong Kong Association of Banks to mark down the prime rate to 8.5 percent in March 1984.

With economic recovery offsetting the effects of a weak Hong Kong dollar, total imports increased 10.3 percent to $22.5 billion. Imports from Japan (mostly textiles and equipment) rose 5.5 percent to $4.8 billion, and imports from the United States (mostly manufactures) rose 6.3 percent to $2.3 billion. Imports from Taiwan also increased, but those from the European Community (EC) and Singapore declined. The People's Republic of China (PRC), enjoying a price advantage over goods traded in U.S. dollars, claimed 22 percent of total Hong Kong imports. The PRC, because of its nearness and ability to supply a wide variety of raw materials, remained the number one source of imports for Hong Kong. A large jump in imports of clothing, textile products, and crude animal and vegetable materials offset a slight decline in metal and mineral manufactures. Of the $5.0 billion in imports from the PRC, textiles and textile products comprised 35.1 percent, and agricultural products, 19.0 percent.

While a weak Hong Kong dollar somewhat dampened imports, exports benefited greatly. Consequently, total exports jumped 11 percent to $20.6 billion in 1983, following a slight decrease the previous year. Most export

categories enjoyed hefty increases because of the economic recoveries in the United States, Canada, and Japan. For example, the value of the colony's textile exports, which comprise about 32 percent of total exports, increased 5.0 percent to $6.5 billion primarily because of stronger demand in the United States and Canada. Chronic economic problems and local constraints on trade, however, inhibited trading with important partners such as West Germany, where Hong Kong textile exports declined 7.1 percent, and the United Kingdom, where they declined 13.5 percent. Overall exports to West Germany held steady, and those to the United Kingdom increased a modest 3.4 percent.

Hong Kong's 1983 trade defict was $1.9 billion, compared with $2.2 billion in 1982. The deficit was substantially covered by financial inflows, reflecting the colony's major role in Asian banking, investments, and services.

Mini-Constitution Outlined

Near the end of 1983, PRC sources revealed the first details for the proposed mini-constitution that incorporates the PRC's concept of what Hong Kong's future Government will be. The PRC's Foreign Ministry indicated that there would be a unilateral announcement of its policies for Hong Kong in September 1984, even if joint negotiations with the United Kingdom do not succeed. According to the outline of the contents of the mini-constitution, the main points in the colony's future would include:

(1) no change in the legal system, (2) PRC responsibility for defense of Hong Kong, but without stationing troops there, (3) local control over issuance of passports and travel rights for its citizens, (4) no change in the colony's economic system and the right to own property, (5) local tax levies, (6) freedom of resource flows, (7) local control over foreign trade, and (8) exclusion of British expatriates from top posts in the new Government.

The PRC will publish the draft of the mini-constitution for discussion before next September. It then will be made part of the PRC's constitution. The PRC sources suggest that Hong Kong would have a high degree of autonomy; its capitalistic social and economic systems would be maintained for 50 years.

Political jitters over the colony's future contributed to a decline in gross domestic fixed-capital formation of 6.5 percent in 1983, after a 1.6-percent decline in 1982. Several other factors, however, also contributed:

(1) the lagged effects of the 1982 recession, (2) an increase of 550,000 in the labor force in 1981/1982 (from immigrants) causing a substitution of labor for capital in manufacturing, and (3) Hong Kong's investment in the PRC's special economic zones, lessening the need to increase capacity in the colony.

Agricultural Imports Rise Slightly

Total imports of agricultural commodities increased marginally to $3.6 billion in 1983, up from the previous year's $3.5 billion. Most high-value imports, which tend to have relatively high-income elasticities of demand, participated in the rise (table 7). The 1983 recovery appears to have softened the impact of the strong U.S. dollar, as U.S. market share declined only slightly. Total imports of low-value agricultural products also increased slightly in value and markedly in quantity, as a rebounding textile sector created more demand for cotton. An improved livestock sector during the second half of the year and strong demand for reexports boosted demand for feed. Other important agricultural imports included grains, fruits, oilseeds, meat, and live animals. Imports of live hogs, primarily from the PRC, were valued at $194 million, slightly below last year's level. Other important agricultural imports are shown in table 7.

Agricultural imports from the United States comprised about 16 percent of 1983 imports, compared with slightly less than 18 percent the previous year (table 7). Low supplies and high prices for U.S. cotton explain most of the downturn. The U.S. share of Hong Kong's high-value agricultural imports also decreased from 17.5 percent in 1982 to 16.4 percent in 1983, primarily because of stiff competition from the PRC in meat and feed trade. However, the United States captured nearly all of the cigarette trade and one-half of the fresh fruit trade. U.S. traders can offer stable supplies, high quality, and competitive prices on tobacco manufactures, citrus and other fruit, and most of the other high-value (HVP) product categories shown in table 7. In categories where the United States has a weak market share, such as meats and milk and cream, the PRC, and to a lesser extent Australia and New Zealand, offer more competitive prices and benefit from their nearness to the market.

During FY 83, total U.S. exports of agricultural products to Hong Kong decreased nearly 15 percent, led by the decline in cotton exports (table 8). U.S. exports of cotton fell in value by more than half, while exports of most other commodities held steady or fell off slightly. U.S. imports of agricultural products from Hong Kong, mostly mushrooms and fish preparations, increased 20 percent to $51.5 million, encouraged by the strong U.S. dollar.

Economy's Long-Term Future Uncertain

Last year's public proclamations of the PRC and the United Kingdom suggest that an agreement on Hong Kong's future may be reached sometime in 1984. However, if the British fail to negotiate an administrative role in Hong Kong after 1997 and if negotiations are broken off, as is possible, the PRC has indicated it will unilaterally pursue the mini-constitution. British leverage in the ongoing administrative role stems from the PRC's interest in bringing about a smooth transition of ownership that does not cripple Hong Kong's capacity to generate needed foreign exchange. But even if the administrative role issue is settled, other grave considerations not even touched on in last year's negotiations remain, such as (1) what will be the trade status of Hong Kong in The General Agreement on Tariffs and Trade (GATT) (the PRC is not a party to GATT) and in the multifiber agreement on textiles; (2) what happens to Hong Kong's links with important trading partners such as Israel, Saudi Arabia, South Africa, Taiwan, and others, which presently do not have diplomatic relations with the PRC; and (3) what are the economic, political, and military

Table 7.—Hong Kong agricultural imports of selected high- and low-value commodities and U.S. share

Commodity	1977	1982	1983
	Million dollars		
High-value			
Meats, fr. chlld, froz.	130	218	221
Milk and cream	37	63	62
Fresh fruit & nuts, dry	162	270	258
Vegetables, fr., smply prsrvd	80	138	134
Carbohydrate-source feedstuffs	31	40	42
Misc. food prep.	47	87	95
Tobacco manufactures	54	139	136
Others	1,058	1,695	1,750
Total	1,599	2,650	2,698
Low-value			
Corn	32	42	49
Rice	106	133	130
Wheat	21	32	36
Cotton	288	177	209
Oilseeds	17	52	52
Tobacco	16	42	36
Live animals	266	300	282
Other	89	88	94
Total	835	866	888
Total	2,434	3,516	3,586
	U.S. share (percent)		
High-value			
Meats, fr, chlld, froz	20.7	16.8	13.3
Milk and cream	16.3	8.7	14.5
Fresh fruit & nuts, dr	45.6	42.4	46.5
Vegetables, fr., smply prsrvd	13.1	15.8	15.2
Carbohydrate-source feedstuffs	49.3	39.3	27.1
Misc. food prep.	23.0	29.8	28.6
Tobacco manufactures	84.0	82.4	86.0
Others	10.3	7.6	6.3
Total	18.6	17.5	16.4
Low-value			
Corn	—	—	—
Rice	—	—	—
Wheat	62.4	62.8	57.0
Cotton	46.7	42.3	13.3
Oilseeds	1.2	—	—
Tobacco	25.2	25.4	36.5
Live animals	—	—	—
Other	—	—	—
Total	18.2	12.1	7.0
Total	18.4	17.7	16.0

Notes: Data are for calendar years. — = None or negligible.
Sources: UN trade runs, Hong Kong Trade Statistics.

Table 8.—U.S. agricultural exports to Hong Kong, U.S. fiscal years

Commodity	FY 82	FY 83	FY 84 forecast
		1,000 tons	
Poultry meats	27.4	26.5	25.5
Eggs	6.3	5.1	6.3
Wheat and products	119.4	112.7	121.5
Fresh vegetables	35.0	30.9	35.0
Frozen vegetables	5.2	5.5	6.0
Fresh citrus	112.4	113.4	115.0
Other fresh fruit	39.8	40.7	41.6
Tobacco	1.9	1.8	2.0
Vegetable oil	7.3	7.2	6.7
Animal feed	44.0	37.2	40.0
Cotton	60.3	27.5	65.0
Other	NA	NA	NA
		Million dollars	
Poultry meats	28.4	25.5	24.6
Eggs	7.1	5.5	7.5
Wheat and products	21.0	19.5	21.0
Fresh vegetables	13.2	10.7	12.1
Frozen vegetables	3.9	3.9	4.3
Fresh citrus	64.0	62.5	63.4
Other fresh fruit	31.8	30.3	31.0
Tobacco	11.3	10.2	11.4
Vegetable oil	7.1	7.3	7.1
Animal feed	15.0	11.9	12.7
Cotton	76.6	35.0	82.9
Other	123.2	121.4	132.0
Total	402.6	343.7	410.0

NA = Not available.

Source: Bureau of the Census, U.S. Dept. of Commerce; ERS forecasts.

ramifications of the highly probable rupturing of relations between Hong Kong and Taiwan, Hong Kong's third most important trading partner?

Economic Picture Positive in 1984

Despite the political uncertainty over 1997, the overall picture for 1984 is positive. A 6.5-percent GNP growth is possible from increasing exports, which will boost the colony's manufacturing services sectors. On the other hand, anxiety about 1997 may subdue domestic capital spending and the property market. Growth in long-term investments in construction and heavy machinery, which averaged 8 percent a year in the 1970's, is expected to slow to 3 percent in 1984. Inflation is expected to moderate slightly to about 9 percent in 1984, as recent Government measures to stablize the currency appear to be working. Higher corporate and personal income taxes are likely to cover a projected budget deficit.

Sharply expanding sales of U.S. cotton and moderately expanding sales of wheat and (HVP's) are also likely in 1984. U.S. cotton exports will benefit from the sharply reduced supplies of its two major competitors in the Hong Kong market, Pakistan and the USSR, as well as a stronger market for Hong Kong's textile exports. U.S. agricultural exports to Hong Kong are expected to reach $410 million in fiscal 1984 (table 8). [*Richard F. Nehring, (202) 447-8230*]

JAPAN

Exports Lead Steady Recovery in 1983

After slow growth in 1982, Japan's economy continued to be slack at the start of 1983. Investment in plant and equipment by small and medium firms remained at low levels, personal consumption was sluggish, and exports dull. There were notably more business failures in metal, construction, and wholesale and retail industries. By spring, exports, especially of precision instruments,

transport machinery, and electronics, improved along with recovery in other industrialized countries.

The Bank of Japan lowered the official discount rate in October from 5.5 to 5.0 percent, as part of a new economic package to strengthen domestic demand and promote imports. Other key features of the package included a tax cut, public works expenditures, and the elimination or reduction of tariffs on 44 industrial products.

While the dollar strengthened against most major European currencies in 1983, the yen-dollar exchange rate narrowed slightly, averaging 238 yen to the dollar, compared with 249 in 1982. But this lower rate could not overcome weak domestic demand and encourage imports.

Exports rose 5.6 percent in 1983, while imports fell 4.8 percent. Increased exports of computers, computer parts, automobiles, and videocassette recorders, combined with lower oil prices, inflated Japan's merchandise trade surplus to a record $31.65 billion, up sharply from 1982's $18.08 billion. Japan's trade surplus reached an unprecedented $18.14 billion with the United States and $10.41 billion with the EC. The current account surplus also increased to a record $21.02 billion, compared with $6.85 billion in 1982.

The yen's appreciation against the dollar and lower prices for crude oil imports contributed to a 2.2-percent decline in wholesale prices in 1983, the first decline in 5 years. Consumer prices rose less than 2 percent, the lowest increase in 24 years, reflecting stable wholesale and service prices. Unemployment rose to a post-World War II high of 2.6 percent, despite a 3.5-percent gain in industrial production. Housing starts declined for the fifth consecutive year.

Agricultural Production Expands Slightly

Japan's total agricultural output grew only slightly in 1983. Cold weather hindered production of wheat, rice, pulses, forages, onions, and potatoes (table 9). However, good growing conditions for fruit boosted production of mikans, apples, and sweet cherries, even without any significant expansion in area. Livestock production continued to expand, and milk output increased notably because of greater numbers of milking cows and increased output per cow.

Farmers in Japan were probably not much better off in 1983 than the year before. Again, cool weather kept yields lower than normal, while production costs continued to rise. Along with lower farm prices for many commodities, these factors brought down farm income in FY 82 (April 1982/March 1983)—the latest year for which data are available. However, healthy gains in nonfarm income kept total farm incomes substantially above the average for blue collar workers in urban areas. Income from farming declined to 15.3 percent of the average farm family's total income in FY 82, compared with 16 percent in FY 81.

Because of budgetary pressures, the Government has tried to keep the support price for rice and other key commodities stable. While this will prevent any major increase in farm prices, a return to normal yields and an improved economy could result in a modest increase in farm income in 1984.

Table 9.—Japan: Production of selected agricultural commodities

Commodity	1982	1983	1984	Share of total production[1]
		1,000 tons		*Percent*
Rice	9,346	9,433	10,120	32
Pork	1,427	1,427	1,455	14
Vegetables	13,893	13,800	13,850	10
Eggs	2,059	2,091	2,070	8
Milk	6,750	7,050	7,070	8
Poultry meat	1,080	1,135	1,160	6
Citrus fruit	3,587	3,757	3,700	5
Beef & veal	481	490	495	4
Total				87

[1]Based on 1983 production and 1969-71 average producer prices.

Sources: Government of Japan; FAS; ERS estimates.

Food Prices Up in 1983

Food prices were, on the whole, slightly higher in 1983 than in 1982 (table 10). Retail meat prices were up, with pork showing the largest price increase. Egg prices were down 9 percent, the lowest since 1979. Milk prices were steady. The retail price of rice rose slightly, while wheat flour prices rose more than 5 percent, largely because of an 8.2-percent increase in the resale wheat price. Prices of certain soybean-based food products showed no gains over 1982.

Total Agricultural Imports Up

In 1983, Japan's total imports of agricultural products climbed to $16.8 billion, up from $16.3 billion in 1982. A value increase in imports of meat and meat products, grains, fruit and nuts, and oilseeds more than offset a decrease in imports of dairy products, eggs, sugar, and confectionery products. The United States supplied 41 percent of the value, compared with 39 percent in 1982. Japanese exports of agricultural products totaled $1.1 billion, up slightly from 1982. Exports of some fruits, such as pears and apples, to other Asian and Middle Eastern markets, and more recently, exports of long-life milk to Singapore, have been expanding.

U.S. agricultural exports to Japan increased slightly in U.S. fiscal 1983, to $5.9 billion (table 3). Greater exports of U.S. beef, poultry meat, fruits, wheat, coarse grains, soybeans, and tobacco offset reductions in exports of pork, inedible tallow, vegetables, and cotton.

Rice Production Up Slightly

Because of low yields caused by poor weather, rice production increased only 1 percent in 1983, to 9.43 million tons. This was the fourth consecutive year of below-normal harvests. Harvested area was up slightly, at 2.27 million hectares; 638,000 hectares of paddy area were diverted to other crops under the riceland diversion program (compared with 662,000 hectares in 1982), exceeding the Government's target of 600,000 hectares by 6 percent. Because of four successive poor rice crops, stocks of newer "edible" rice are critically low (about 90,000 tons at the end of October 1983) and will still be low at the end of the 1983/84 marketing year in October 1984 (table 11).

Table 10.—Japan: Retail food prices

	1982	1983[1]	Percent change 1983/1982
	Yen/Kg.		*Percent*
Beef	3,420	3,512	+2.69
Pork	1,570	1,628	+3.69
Chicken	1,180	1,190	+0.85
Eggs	359	325	−9.47
Milk (200cc)	57	57	—
Rice[2, 3]	440	447	+1.59
Wheat flour[2]	193	203	+5.18
Soybean paste	333	333	—

Note: — = No change.

[1]Preliminary. [2]January-October average. [3]Non-glutinous, medium quality.

Sources: Office of the Prime Minister and Ministry of Agriculture, Forestry and Fisheries, Government of Japan.

Table 11.—Japan: Rice production and use

	1981/82	1982/83	1983/84
		1,000 tons	
Production	9,337	9,346	9,433
Imports	66	14	15
Consumption			
Food	9,716	9,737	9,540
Feed	372	787	54
Industrial	250	250	186
Total	10,338	10,774	9,780
Exports	304	223	320
(Jan.-Dec.)	(318)	(321)	(200)
Ending stocks	2,457	820	168

November-October marketing year.

Source: FAS.

Rice Consumption Continues to Decline

Per capita consumption of rice continued to decline in FY 82 to 77.5 kgs. from 77.8 kgs. in FY 81. The downward trend in rice consumption is expected to continue as young people eat less rice and more bread and meat. Total food consumption of rice is projected to decline 2 percent during November 1983-October 1984.

Rice Exports Decline

About 321,000 tons of rice were exported in 1983, slightly more than the 318,000 tons in 1982. Of Japan's total rice exports in 1983, 70 percent or more were concessional sales and the remainder were grants for food-aid programs. Most of the concessional rice was sold to Madagascar, Tanzania, Mozambique, Kenya, Bangladesh, and Indonesia. Very little rice will be available for export in 1984. Japan's 1980 rice agreement with the United States, which limited Japanese rice exports to about 400,000 tons annually, expired at the end of March 1984.

Feed Use of Rice Up Sharply

Japan continued to use substantial amounts of rice for livestock feeding in 1983. An estimated 787,000 tons of rice were used as feed during November 1982-October 1983, more than double that for a year earlier. Rice used for livestock feed offset some imports of feed grains, primarily sorghum. A sharp decline in the use of rice for feed is forecast for 1983/84, mainly because of low stocks. Approximately 200,000 tons of rice that would have been available for feed have instead been earmarked for industrial uses.

Rice Price Increases

Largely for budgetary reasons, the Government decided to increase the consumer rice price (Government resale price) by 3.76 percent to $1,377 per ton, effective February 15, 1984. With no change in the Government resale price for wheat, this made consumption of wheat somewhat more attractive. In April 1983, the resale wheat price was raised 8.2 percent, while the resale rice price was increased only 3.9 percent.

New Rice Production Plan

Japan's current situation contrasts sharply with that of the 1970's when Japan was burdened with large rice surpluses. Those surpluses prompted the Government to implement two rice disposal programs designed to reduce stocks through subsidies for exports, animal feeding, and industrial use. The second surplus rice disposal program ended in March 1984.

To rebuild stocks for food security, Japan's Ministry of Agriculture, Forestry, and Fisheries (MAFF) has developed a 1984-86 rice production plan. The new plan will allocate only a small amount of rice for industrial use. Also, the Government will curtail rice exports and will discontinue using rice for livestock feed because of the high cost, administrative problems, and political pressure from other rice exporters.

Plan targets include building rice stocks to between 1.1 and 1.4 million tons (about 1.7 months consumption) by the end of FY 86; setting aside 600,000 hectares each year (540,000 hectares to produce alternative crops, and 60,000 hectares to produce "other use" rice to make rice crackers, soy sauce, bean paste, etc.); and producing about 9.5 to 9.6 million tons of food-use rice annually. Under this plan, total production of rice for food, industrial use, and stocks would amount to 10.1 to 10.3 million tons annually—an achievable goal, given normal yields and lowered diversion targets.

Plans to increase current low stocks and reduce cash incentives for diversion could result in less paddy being diverted to other crops, with lower production of wheat, soybeans, forages, and barley. Therefore, imports of these crops could increase slightly.

Wheat Output Declines; Imports Up

Wheat output declined 6 percent in 1983 to 695,000 tons, despite a slight increase in area. Unusually cold weather reduced yields and production in Hokkaido, where one-third of Japan's wheat crop is produced. The upward trend in wheat area has slowed in the past several years because the Government support price for wheat has not been increased since 1980, and because the rice area diverted to wheat and other crops has leveled off since 1981. As a result of MAFF's new rice production plan and reduced incentives for wheat diverson, about 13 percent less area will be devoted to wheat production in 1984.

Imports of wheat totaled 5.8 million tons in 1983, up slightly from 1982; 3.3 million tons came from the United States. Both Australia and Canada have bilateral wheat understandings with Japan under which Japan imports about 1.3 million tons annually from Canada and 0.9 million tons from Australia. These quantities are expected to stay roughly the same in 1984. Although still small, Japan's imports of pasta products, such as macaroni and spaghetti, increased more than 50 percent in 1983. Japan's exports of wheat flour, notably to Singapore and Hong Kong, have increased greatly in recent years.

Livestock Gains Continue

Livestock production continued to expand in 1983, although at a slower pace. Production of beef and veal rose 1.8 percent to 490,000 tons, compared with over 2-percent growth in 1982. Pork output remained steady at 1.43 million tons, after expanding 2.2 percent the previous year. Although less vigorous than 1982's 7.6-percent rise in production, broiler output climbed a healthy 5.1 percent. Egg output grew 1.6 percent, compared with 2.9 percent in 1982. Only milk production grew faster than in 1982, expanding 4.4 percent, compared with 2.1 percent a year earlier.

Imports of beef and veal totaled 137,000 tons in 1983, 15,000 tons greater than in 1982. Although Australia is by far Japan's largest supplier of beef and veal (excluding offals), the United States increased it's share of Japan's imports to 27 percent, primarily because of Japan's efforts to reach its commitment of 30,800 tons for high-quality beef. The United States dominates the market for beef offals, a nonquota item. Japan's total quota for beef and veal imports was increased to 141,000 tons for FY 83. Short of removing the quota, the United States has been seeking a substantial expansion of Japan's beef imports through larger quotas. The previous framework for setting beef import quotas, established during the Tokyo Round of Multilateral Trade Negotiations (MTN), expired at the end of March 1984, and a new framework is currently under negotiation.

Pork imports increased 18 percent to 166,000 tons in 1983, despite the continued ban on Danish pork imports until September 1, 1983. The Japanese Government had imposed the ban on Denmark's pork in March 1982 because of an outbreak of hoof-and-mouth disease. Total 1983 imports of Danish pork were 13,000 tons (product weight), compared with 19,000 tons in 1982, and 72,000 tons in 1981. Taiwan picked up most of Denmark's loss in market share, capturing close to 20 percent of the market in 1983, compared with 14 percent in 1982.

Chicken imports fell slightly in 1983. While the U.S. share recovered to about 65 percent, Thailand's share contracted because of less competitive prices. Brazil entered the market in late 1983, shipping over 1,000 tons by the end of the year, and could gain a potentially larger share of the market. Japan's import tariff on chicken meat (other than bone-in legs) will be reduced from 20 percent to 18 percent, effective April 1, 1984. Thailand had been officially requesting the lower rate. The tariff reduction will not greatly benefit the United States, which ships mostly bone-in legs. Egg and egg-product imports continued to plummet in 1983, a result of expanded domestic output and a weak domestic market for eggs.

MAFF Promotes Beef Production

Under its revised dairy industry promotion law, MAFF will implement programs designed to achieve 1990 production targets for milk and beef. MAFF aims to increase milk production 23 percent to 8.42 million tons, and beef production 30 percent to 630,000 tons (carcass weight). A key goal is to lower the cost of beef production. To accomplish this, MAFF is promoting larger-scale operations and better management, with improved feed conversion rates and reduced finishing times. The program favors production of leaner beef. MAFF is also encouraging greater use of grass forage and domestic feed, to lessen reliance on concentrate feeds, made from mostly imported ingredients.

Beef, Veal, and Pork Consumption Steady

Growth in beef and veal consumption was marginal in 1983. A Government survey showed a 2.3-percent decline in household purchases of beef during January-October 1983, which was outweighed by increased beef consumption in restaurants. Total pork consumption in 1983 was almost unchanged from the year before; a decline in household purchases of pork was offset by a slight increase in consumption for processing. Consumption of beef and veal is expected to increase in 1984, while consumption of pork will remain steady. Consumption of lamb and mutton appears to have leveled off at around 170,000 tons.

Formula Feed Production Expands

Total output of formula feed continued to increase in 1983, reflecting growth in the livestock sector. Production of feed for cattle, hogs, and broilers showed the greatest expansion. Because of higher world grain prices, feed prices were raised several times during the year. However, payments from feed-price stabilization funds, both private and Government supported, minimized the impact on livestock producers. Payments from stablization funds are made periodically to reduce fluctuations in feed prices. Zennoh, Japan's largest feed manufacturer, raised feed prices in July and again in October. Prices, at least through June 1984, are expected to remain at 78,550 yen ($335) per ton, but farmers will be paying slightly more for feed because rebates from the Government-supported mixed feed-price stabilization fund were temporarily suspended this January.

Forage Production Down

Japan's production of all grasses in 1983, 30.8 million tons (green basis), declined 3 percent from 1982, although area was up 1.2 percent. Over the past few years, demand for forages has risen because of a steady expansion in cattle herds. Production of forages has increased, along with gains in total area and yields. The Government has encouraged farmers to expand forage crop production to increase self-sufficiency in livestock feeds. MAFF targets for forage production in 1990 are perhaps overly optimistic, nearly doubling 1980 levels. These targets assume greatly improved yields and a 50-percent area expansion. Forage area has continued to increase because of the Government's riceland diversion

program and subsidies to develop unused land for pasture. However, expansion may slow because of MAFF's lowered diversion targets.

Domestic forage is not competitive with imports that are generally higher in quality and lower in price. For 1983, roughage imports rose 25 percent, with a substantial increase in beet pulp, baled hay, and hay cubes. Beet pulp, imported primarily from the United States, is the main imported roughage. Most of the imported beet pulp is sold to dairy farmers for direct feeding. The United States also continued to supply most of Japan's hay cube imports, although metal wire in some U.S. hay cubes lowered its quality. The total value (c.i.f.) of Japanese forage imports from the United States was $182 million in 1983. Many Japanese farmers traditionally use rice straw in animal feed, and MAFF is encouraging them to increase its usage. The demand for high-quality forage seeds, mostly imported from the United States, has been increasing along with the rise in forage production.

Grain Consumption Up

Despite higher world prices for grains in 1983, consumption of coarse grains increased, a result of continued livestock expansion. Total imports of corn were up 8.3 percent from 1982, to 14.7 million tons, while sorghum imports dropped 13.7 percent to 2.9 million tons as rice continued to replace sorghum in animal feed. Barley imports were up 11 percent to 1.5 million tons.

The United States gained a larger share of Japan's corn imports in 1983, primarily because South Africa, a major supplier, had less corn available for export. Corn imports from Thailand declined because of aflatoxin problems and reduced supplies. U.S. sorghum exports fell sharply as Argentina seized the dominant share of the market. U.S. barley exports were up 19 percent from 1982. Shipments of barley from Canada were up slightly, but imports from Australia were off 13 percent.

Soybean Crush Reaches Record

Strong demand for soymeal from the feed sector catapulted soybean crush to a record 3.95 million tons in 1983. Despite higher soybean prices in 1983, crushers did not switch to rapeseed because soybean crushing remained more profitable in the face of strong soybean meal prices and a lower-than-expected oil content in Canadian rapeseed.

Soybean imports rose almost 15 percent in 1983 to 4.9 million tons. Imports of U.S. soybeans reached a record volume of 4.6 million tons, although imports of 300,000 tons of food-use beans from the PRC cut into the U.S. market share. Exports of U.S. soybeans are expected to remain strong, but the volume will be affected by crushers' preferences for soybeans or rapeseed.
Domestic production of soybean meal was up 10 percent in 1983, while soybean meal imports nearly tripled. Both increases came from greater demand for meal in the feed industry. The bulk of Japan's 1983 soymeal imports (234,000 tons) came from Brazil. The U.S. market share fell to only 16.1 percent in 1983 compared with 54.4 percent in 1982, because of high U.S. export prices.

Although soybean meal prices were higher in 1983, its use in mixed feed rose nearly 10 percent. The reason was an increase in total feed production and a greater proportion of soymeal used in the total feed ingredients—11.2 percent in 1983 compared with 10.6 percent in 1982. This ratio may decline in 1984 if soybean meal prices continue to rise relative to rapeseed and fish meal. Rapeseed meal use was up marginally in 1983; although with a 3-percent decline in domestic production, imports tripled to 70,000 tons.

Strong demand for soyoil in 1983 was met mostly from a 10-percent increase in domestic production. Imports fell to 7,000 tons, down from 38,000 in 1982. The United States supplied 62 percent of Japan's soyoil imports, and Brazil supplied the rest. Because rapeseed oil is substituted for soybean oil when prices are competitive, soybean oil consumption in 1984 will depend on this price relationship.

Vegetable Production Down Slightly

Total vegetable production was down slightly in 1983, largely owing to lower output of onions and pulses. Onion production declined an estimated 3 percent from 1982 because of a reduced crop in Hokkaido, which produces about one-third of Japan's onions. In 1983 producer onion prices recovered from the 1982 low; this should encourage area expansion in 1984. Onion imports were 7 percent below the 72,000 tons imported in 1982, but the U.S. share of imports increased notably to 19 percent. Potato production declined 5.6 percent to 3.48 million tons. Producer prices for table potatoes improved nearly 25 percent from 1982, but have shown a steady decline after their summer peak. Imports of U.S. frozen potatoes continued to gain in 1983 because of strong demand from the fast-food industry.

The adzuki bean crop declined about 35 percent from 1982 because of the abnormally cool summer in Hokkaido, which produces between 60 and 70 percent of Japan's adzuki beans. Average adzuki bean yields in 1983 were the lowest since 1971. Domestic prices were increasing until August, when MAFF raised the import quota on adzuki beans from $3.5 million to $8.5 million. In 1983, adzuki bean imports were 35,092 tons, down from 44,475 tons in 1982. Japan's import quotas for pulses for FY 83, which are issued in dollars, totaled $48.8 million, down from $67.2 million in FY 82.

MAFF established production controls for pulses in 1983 for the first time. Controls apply only in Hokkaido, Japan's main pulse-producing region, and cover two crops: Adzuki beans and kidney beans, Japan's major pulse crops. MAFF establishes target levels of area, but participation in the program is not mandatory. Target levels for planted area were greatly exceeded in 1983.

Fruit Output Increases

The 1983/84 mikan harvest, Japan's primary citrus crop, was up 5 percent to an estimated 3 million tons. Mikan is an alternate-bearing crop and this was its "on year." Moreover, younger trees planted in the 1970's had reached maturity. Had there not been ongoing voluntary fruit thinning by mikan growers, the harvest would have been even greater. At current output, growers can expect to break even. Beginning in fiscal 1984, a new MAFF program will reduce mikan area 10,000 hectares, to 110,000 hectares within 3 years. MAFF will provide

1.7 billion yen in subsidies to shift production from mikan to other crops such as kiwi-fruit, yams, or figs. During the first production adjustment program, covering fiscal years 1979-83, mikan area declined 20 percent from 150,000 to 120,000 hectares.

Production of all the major non-citrus fruits grown in Japan—apples, cherries, pears, grapes, peaches—increased in 1983, mostly because of good growing conditions. There was no significant change in fruit-bearing area. Apple production reached an estimated 1 million tons, the largest harvest since 1971. Japan's output of sweet cherries reached a record 24,100 tons in 1983.

Under the 1979 MTN trade agreement, Japan's import quota for fresh oranges is 82,000 tons for FY 83. The United States supplies almost all of Japan's fresh orange imports, although Australia shipped a small quantity of oranges to Japan for the first time in September 1983. There is no quota for grapefruit imports, which were liberalized in 1971. The United States supplied 94 percent of Japan's total grapefruit imports of 177,000 tons in 1983, with Israel, Mexico, Swaziland, and Cuba supplying the rest. Japanese consumer reaction to the recent decision to stop using EDB (ethylene dibromide) to fumigate U.S. citrus, and quality problems related to the cold-treatment of grapefruit, an alternative fumigation method, could reduce exports of U.S. grapefruit to Japan.

Economic Upturn To Continue in 1984

The Japanese Government forecasts real economic growth of 4.1 percent in FY 84. This compares with 3.4 percent for FY 83 and is consistent with most private-sector forecasts, which vary between 4 and 4.7 percent. In contrast to 1983's export-fueled recovery, the Government expects domestic demand to lead economic growth in 1984. Consumer prices are expected to rise a modest 2.8 percent, held down mainly by stable crude oil prices. A number of Japanese research institutions foresee the yen strengthening in FY 84, but not below 220 yen to the dollar. Even with a stronger yen, growth in Japanese exports is expected to outpace the rise in imports leading to a record-high trade surplus again in 1984.

If weather permits, agricultural output will expand modestly in 1984. With less paddy land diverted to alternative crops and with normal yields, rice output could increase 7 percent. The change in the riceland diversion program, in addition to lower incentives to grow wheat, will likely result in a decline in wheat output, however. Greater production of onions and potatoes should offset a possible decline in pulse output because of production controls established for adzuki and kidney beans. Mikan production will likely decline because of the currently planned reduction in area, and ongoing fruit thinning by growers.

Gains in Japan's livestock sector will be modest in 1984. Beef and veal production is expected to increase about 1 percent, while growth in poultry output will taper off because of MAFF's guidance to increase broiler output only 2 percent. Output of milk may increase marginally, but eggs may decline because low 1983 prices reduced chick placements. Pork output is forecast to expand 2 percent, compared with no growth in 1983.

The improving economy should stimulate increased demand for most livestock products. So, imports of poultry meat, eggs, and beef and veal are expected to rise in 1984, but pork imports likely will decline because of stagnant consumer demand for pork and a slight increase in domestic production.

Total coarse grain consumption in 1984 is expected to increase slightly from 1983, because of an anticipated 2- to 3-percent rise in livestock feed production. Imports of corn are expected to decline because of increased usage of more competitive sorghum and rye in animal feed. With the end of the rice disposal program, sorghum will replace rice in animal feed, resulting in greater sorghum imports in 1984. Stock building and an increase in consumption will also cause barley imports to expand.

With continued stronger prices for many commodities, an upturn in U.S. cotton exports along with robust exports of feed grains and soybeans could boost U.S. agricultural sales to Japan to a record $7 billion in FY 84. The U.S. is expected to supply almost all of Japan's corn imports because of limited availability in other corn-exporting countries. Because of competitive prices, Argentina is expected to continue to be a major supplier of sorghum, keeping the U.S. share at or slightly above 1983's level. With Canada expected to supply about 900,000 tons of barley to Japan under a supply assurance agreement, the United States and Australia will vie for the remaining 600,000-700,000 tons that Japan is expected to import. U.S. wheat exports are expected to increase slightly to 3.4 million tons, and soybean exports to remain strong at 4.6 million tons. U.S. cotton sales are projected to increase substantially from FY 83's reduced level, surpassing the 360,000 tons shipped in FY 82. The U.S. share of Japan's cotton imports will be 50 percent, or more, because of reduced imports from other major suppliers. [*Lois Caplan, (202) 447-8860*]

THE REPUBLIC OF KOREA

Construction, Exports Lead Vigorous Recovery in 1983

South Korea's economy shifted into high gear in 1983. Real GNP rose 9.3 percent, surpassing even the most optimistic official targets. Despite stagnant export sales during the first half of the year, income grew rapidly in response to heavy domestic investment expenditure, especially for housing and infrastructure construction. However, the emerging economic recovery in the United States, Korea's largest foreign market, sparked vigorous export growth that began in mid-1983 and continued to accelerate through the end of the year. Total exports rose 15.3 percent (11.7 percent in real terms) to $24.1 billion, exceeding the Government's yearend target by nearly 3 percent. This led to a dramatic reduction in the current account deficit, to $1.7 billion (from $2.6 billion in 1982 and $4.6 billion in 1981), sharply limiting the heavily indebted nation's need for new borrowing in international capital markets. The pattern of export growth reflected South Korea's continuing shift from light manufactures toward heavy industrial products. Exports of electronic products, ships, and machinery were especially strong, each registering gains of 30 percent or more, while sales of textiles fell slightly (1 percent) and those of plywood and wood products declined precipitously (28 percent).

South Korea's 1983 growth performance was especially impressive because it was achieved together with a sharp reduction in inflation. Wholesale prices fell nearly 1 percent, the first decline in 25 years. Consumer prices rose only 1.7 percent, compared with increases of 2.4 percent in 1982, 11.3 percent in 1981, and 42.3 percent in 1980. The slowdown in inflation resulted from declining international oil prices; from falling domestic prices for rice, barley, wheat, and pork over much of the year; and from tight monetary and fiscal policies. The austerity in 1983 economic policy was reflected in a first-time general freeze on the purchase prices at which rice, barley, and other grains were procured by the Grain Management Fund of the Korean Ministry of Agriculture and Fisheries (MAF). This move was intended as a first step in reducing the enormous deficit of the Fund, currently estimated at $2 billion (over 2 percent of GNP).

Agricultural Growth Modest

Domestic agricultural output grew by a modest 4.2 percent in 1983. Grain production was mixed, with rice output falling slightly and barley output rising appreciably from 1982 (table 12). Production of fruits expanded considerably with favorable weather; vegetable production fell slightly from 1982's bumper level. The largest source of agricultural growth was in the livestock sector, where low feed prices during the first half of the year and rising consumer demand for pork, beef, and milk led to greatly increased numbers of hogs, and to expanded dairy and beef cattle herds. Increased production of pork and beef followed as rising prices on imported feedstuffs led to increased slaughtering.

Rice Output Down, Barley Up

Poor weather and related insect and disease problems reduced 1983 rice production to 5.1 million tons, keeping yields and output below the drought-affected levels of the previous year. The decline in production contrasted sharply with optimistic forecasts made earlier in the year. Growing areas received ample rainfall during the summer monsoon, allowing an expansion in irrigated area. Farmers responded by increasing rice area to 1.23 million hectares from 1.19 million hectares the year before, despite the purchase price freeze. The proportion of total rice area sown to high-yielding varieties (HYV's) increased slightly to 34 percent. However, the extended period of cloudy and wet weather during and after the monsoon adversely affected the crop by blocking out needed sunlight and by providing ideal conditions for the brown planthopper and other insects and diseases. A typhoon caused further damage in southern areas through flooding and lodging. Finally, sporadic rains during the September-October harvest period delayed threshing, causing problems with chalkiness and brokens, especially among the HYV's. Together, these problems lowered average yields to 4.15 tons per hectare, compared with 4.36 tons for the 1982 crop.

Table 12.—South Korea: Production of selected agricultural commodities

Commodity	1982	1983	1984	Share of total production[1]
		1,000 tons		*Percent*
Rice	5,175	5,100	5,300	36
Barley	749	815	707	2
Vegetables	7,871	8,000	7,900	26
Eggs	266	290	325	5
Beef & veal	83	98	125	5
Pork	238	295	332	4
Poultry meat	100	113	126	4
Milk	575	660	780	3
Total				85

[1]Based on 1983 production and 1969-71 average producer prices.

Sources: Government of Korea; FAS; ERS estimates.

Food barley area harvested in 1983 increased marginally to 289,000 hectares, with promising weather at planting time apparently outweighing the purchase price freeze in farmers' planting decisions. Malting barley area continued to expand rapidly in response to growing demand by breweries, rising 10 percent to 33,000 hectares. In contrast to its effect on rice, the weather led to excellent barley yields, with production up 9 percent to 815,000 tons (polished). This reversal of the decline in barley production since 1979 is likely to prove only temporary.

Corn area and production fell to their lowest levels since 1978 because of poor weather and frozen price supports. Production of other minor grains was mixed: Sorghum continued to decline in response to poor returns, while excellent weather helped produce the largest wheat crop since 1972. Wheat production is expected to fall off sharply beginning in 1984 because the Government has decided to discontinue purchasing the crop.

Income Growth Shifts Demand From Food Grains to Meats

Generally stable or declining food prices aided food consumption in 1983, while growth in real incomes led to increased demand for animal products and reduced demand for food grains. Despite a slight decline in retail prices, total rice consumption in 1983 fell 3.3 percent to its lowest level since 1977. The drop in per capita consumption was even more pronounced, with consumption falling 4.8 percent to 131.2 kgs. Following a smaller drop in 1982, this appeared to confirm the impression that per capita rice consumption is now beginning to trend downward in response to increased real income. The decline in consumption exceeded the drop in production, raising yearend Government stocks to 2.5 million tons, up from an already burdensome 2.3 million tons at the beginning of 1983. In a startling reversal of its longstanding efforts to hold down rice consumption so as to minimize the need for imports, the Government launched a campaign to increase rice consumption by public employees. However, much of the rice in Government hands consists of HYV's harvested in 1981 and 1982, and consumers are likely to resist official inducements to buy this inferior rice as long as supplies of traditional rice are abundant. Moreover, in mid-December, MAF raised the prices at which rice and barley from its stocks would be sold to the general public. This step was part of the overall effort to trim outlays on food subsidies, but will further reduce consumption and add to the buildup in rice and barley stocks.

Barley demand slipped sharply because ample supplies of rice were available at reasonable prices, and because consumer preferences continue to shift away from barley as real incomes increase. The Government's inability to

dispose of barley procured from farmers boosted stocks to 470,000 tons at the end of November, more than 50 percent above a year earlier. To reduce these stocks, the Government decided for the first time to dispose of barley for nonfood purposes. Some 100,000 tons were sold to feed mixers and an equal amount to alcohol producers. Getting producers to purchase this barley required some official pressure, in that the selling price was 2.5 to 3 times higher than the prices of imported feed grains.

Total consumption of wheat flour increased less than 1 percent in 1983, with per capita consumption declining slightly to around 50 kgs. As with barley, this decline resulted from the availability of rice at low prices and the continuing dietary shift away from grains and toward animal products.

Output of Horticultural Products Mixed

Fruit production climbed 17 percent from 1982, largely because of improved yields stemming from excellent weather and no significant disease and insect problems. Increased output of grapes and tangerines accounted for most of the total gain. Overproduction and low prices for Chinese cabbage and radishes in 1982 led to a drastic reduction in their production in 1983, offsetting increased production of other vegetables. Total vegetable production fell 10 percent from 1982, but supplies were ample in relation to demand.

Dramatic Rise in Hog Numbers Leads to Glut

Livestock markets were dominated by the expectation of rising demand for livestock products, reflecting growth in consumer incomes. The swine industry experienced a rapid buildup in hog numbers, which was slowed but not halted by increased slaughter in the final months of 1983. High slaughter prices following an outbreak of hog cholera late in 1982 sparked the buildup. Swine breeders, acting on the belief that rising consumer incomes would continue to drive up meat prices, increased hog numbers from 2.2 million head in January to over 3 million head by midyear.

Fearing a recurrence of the severe overproduction experienced in 1979, the Government began warning farmers to reduce farrowings and increase slaughter, but the warnings went largely unheeded. In October, the Government finally raised the feed corn "break price" (the price at which imported corn is sold to feed mixers) to reflect increased prices for imported corn. Hog farmers responded to the resulting rise in mixed feed prices and to indications that further increases were on the way by increasing slaughter rates sharply. By December, retail pork prices had fallen 23 percent in 2 months, while hog prices had fallen to less than half their level earlier in the year.

Despite the drop in prices, the buildup in hog numbers continued through the end of the year, when they were reported to be well over 4 million head and still rising. The Government raised the sales price of imported beef twice in an effort to bolster hog prices, hoping to shift consumer demand toward pork, while simultaneously cutting the nation's import bill for beef. This raised pork consumption considerably, but provided only a limited cushion for hog and pork prices.

Cattle Numbers Continue To Rise

Growing demand for beef and milk prompted farmers to continue the buildup in cattle numbers they began in mid-1982, but the changes here were less dramatic than those affecting the hog industry. The Government strongly encouraged the buildup, increasing the cattle import quota to 100,000 head (90,000 beef breeding cattle and 10,000 registered Holsteins), and also offering generous loans to farmers who imported breeding cattle. Because of these various forces, cattle numbers (including beef and dairy breeds) rose from 1.75 million to 2.05 million in 1983. Cattle prices peaked in September, having risen almost without pause since January 1981. This suggests that herd size had finally caught up to farmers' desired levels through a combination of domestic calf births and cattle imports.

Through 1982, Australia and Canada were the major suppliers of South Korea's beef cattle imports, while most dairy animals came from the United States. The U.S. share of the beef cattle market rose considerably in 1983, owing to growing enthusiasm among farmers for Charolais cattle. Of 70,000 head of beef cattle imported during 1983, 30,400 were supplied by the United States. However, future sales of U.S. beef cattle to South Korea were dealt a serious blow in September, when the MAF eliminated a $110-a-head preference for cattle shipped by airfreight, a preference which had been crucial in allowing U.S. and Canadian beef cattle to compete with lower priced Australian breeding stock. This step was reportedly taken because of the high death rate occurring among early shipments of U.S. Charolais. These developments are not expected to affect imports of U.S. dairy cattle.

Income Growth Raises Pork And Beef Consumption

Rising consumer incomes led to increased demand for all livestock products in 1983. Beef is generally recognized as the preferred meat in Korea, but the impact of rising incomes on beef demand was partially offset by a marked drop in pork prices, which pushed consumers toward pork. Beef consumption rose to 172,000 tons in 1983, an increase of 14,000 tons (16 percent) over 1982. Increased domestic production and a drawdown in meat inventories (15,000 tons and 9,000 tons, respectively) allowed a reduction in imports of Australian beef. Years of official efforts to shift consumer preferences from beef to pork appeared to pay off to some degree in 1983: Consumers responded to the sharp drop in pork prices and the slightly increased prices of domestic and imported beef by increasing pork consumption to 268,000 tons, 30,000 tons (13 percent) over 1982. Consumption of chicken meat increased from 99,000 to 113,000 tons, owing to the steep decline in price since the previous year. Egg consumption grew less strongly, to 4.9 million eggs from 4.5 million in 1982. Finally, milk consumption continued the rapid growth seen in recent years, rising by an estimated 20 percent.

Feed Demand Up Strongly

Growth in cattle and hog numbers and in production of livestock products led to strong growth in demand for animal feed, and thus for imports of feed grains and oilseeds. Production of mixed feed rose to 5.8 million

tons in 1983, 36 percent above 1982. Demand remained strong through the end of the year, despite a 5- to 8-percent rise in feed prices in November, resulting from an increase in the feed corn "break price" in the previous month. Feed consumption of corn during the 1982/83 marketing year (November/October) rose to 3.4 million tons, an increase of more than 1 million tons over the previous marketing year. Feed use of sorghum fell by more than 50 percent because of sorghum's price disadvantage relative to other feed grains. The high price of U.S. sorghum led to a sharp drop in the U.S. market share to 55 percent in 1982/83, down from 100 percent the previous marketing year. Argentina and Australia absorbed the remainder of the market.

Rising corn and sorghum prices prompted feed mixers to substitute other imported grains such as rye, oats, and feed wheat late in 1983. Moreover, the Government is encouraging feed mixers to use cheaper feed grains for at least 40 percent of their total grain needs in 1984; this will further reduce feed corn imports during the year.

Increased demand for protein meal by the livestock sector boosted imports of both soybeans and soybean meal in 1983; however, the import mix shifted in favor of meal as the year progressed. In part, this resulted from an oversupply of soybean oil, and in part from a tilt in world prices in favor of meal later in the year. South Korea continued to import soybeans exclusively from the United States, with imports rising 17 percent to 680,000 tons from 582,000 tons the year before. Meal imports rose 172 percent to 340,000 tons, with the U.S. market share falling from 50 to 26 percent because of price competition from Brazil. Total consumption of soybean meal (imported and domestically crushed) rose by 48 percent over 1982, from 474,000 tons to 700,000 tons. Imports of Canadian rapeseed declined in 1983, but this was offset by increased imports of rapeseed meal.

Feed Grains, Soybeans Lead Agricultural Import Growth

Increased purchases of feed grains and soybeans were by far the largest sources of growth in South Korea's imports of U.S. agricultural products in 1983. These gains outweighed a reduction in U.S. sales of raw cotton, which in value is the leading U.S. agricultural export to South Korea. Korea imported 340,000 tons of raw cotton from all sources in 1983, roughly the same as in 1982. Rising consumer incomes led to increased textile production for the domestic market, but this was balanced by poor export sales of textiles and clothing to the industrialized countries, and by the high price of imported cotton in relation to domestic polyester fiber. High U.S. export prices and reduced GSM-102 credit guarantees cut the U.S. market share to 84.4 percent (287,000 tons) from 93.6 percent (319,000 tons) in 1982.

Imports of beef tallow increased marginally in 1983 to 140,000 tons. Domestic Korean beef is sold with the fat attached, so all tallow comes from imports. Tallow consumption in foods (especially instant noodles) declined because of price competition from imported palm oil, while use in soap changed little. Use of tallow in animal feeds, estimated at 10,000 tons in 1983, grew just enough to offset reduced use in food. The U.S. market share improved slightly, to 54 percent from 50 percent in 1982.

Imports of cattle hides increased slightly in 1983 to 135,000 tons, owing to improved demand for exported leather goods. The United States remained the dominant supplier, at 86 percent of total imports. Increased export prices boosted the value of U.S. hide exports to South Korea to $165 million in 1983, 16 percent above 1982.

Imports of corn for processing rose considerably in 1983. Strong demand for high fructose corn syrup (HFCS), the principal product, reflected rising consumer demand for sweeteners and the price advantage of HFCS over sugar. Total nonfeed corn consumption (largely for processing, but including a small amount of fresh corn consumption by households) rose to 780,000 tons from 629,000 tons in 1982.

Tariff Schedules Revised; Corn Stabilization System Dropped

During 1983, the South Korean Government made several changes in agricultural import policy, which were implemented at the beginning of 1984. First, tariff rates were changed on several key agricultural imports. All corn imports will enter under a 7-percent temporary tariff rate, representing an increase (from 5 percent) in the rate for feed corn, and a reduction (from 12 percent) in the rate for industrial corn. The temporary rates on sorghum, rye, and oats were all raised from 5 to 7 percent. The rate on wheat was raised from 3.5 percent to 5 percent, while that on soybeans was lowered from 12 to 10 percent. The rate on hides was reduced from 30 to 10 percent, while the rate on cotton was raised from 1.5 to 3 percent, with a further increase to 5 percent due in 1985. However, cotton used in textiles that are reexported will continue to be exempt from the tariff. Together these changes constitute a slight net increase in the trade barriers facing U.S. agricultural exports to South Korea.

A second change liberalized corn imports. The feed corn break price system and the Feed Corn Stabilization Fund were abolished, effective January 1, 1984. Thereafter, feed mills will buy imported corn at the actual landed price plus tariffs. This move, together with the increased tariff on feed corn, is expected to raise the mill-gate price of corn by about $5 a ton in early 1984, giving some further impetus to substituting feed wheat, oats, and rye. The Government also abolished the requirement that feedmills import their corn through the National Livestock Cooperatives Federation, a Government-dominated organization. In the future, individual mills will be allowed to import corn directly. Most, however, will continue to rely on the federation to handle their import needs, mainly because they lack experience in international trade.

Finally, the requirement that flour millers import wheat though the Korea Flour Millers' Industry Association was lifted, which could lead to occasional purchases of non-U.S. wheat for milling. Two flour mills purchased 3,000 tons of Canadian wheat, the first commercial purchase of non-U.S. wheat for milling.

Prospects Bright for 1984 Income Growth

South Korea's 1984 agricultural imports will depend heavily on continued growth in its export sales and real income. Government planners expect continuing strong

economic growth in 1984. Real GNP is predicted to rise 7.5 percent, somewhat below the pace set in 1983. This forecast is based on an expected increase in the growth of world trade volume from 3 percent in 1983 to 5 percent in 1984. Growth in world trade should translate into real export growth of 12 percent, raising merchandise exports to $27.0 billion in 1984, and lowering the trade deficit to around $1.1 billion. Partially offsetting the improved trade balance, increased interest payments on Korea's international debt and an expected drop in overseas construction orders will lead to an increased deficit for services. The expected result will be a decline in the current account deficit to $1.5 billion from $1.7 billion in 1983. Planners perceive two major risks to the nation's economic growth in 1984; both involve trade with the United States, South Korea's largest trading partner. A severe slowdown in the U.S. economy could blunt demand for Korea's exports and could thus slow its overall growth. The more likely threat, however, would appear to be U.S. enactment of protectionist legislation, directly affecting Korean exports of textiles and footwear, as well as steel and electronic products.

The South Korean Government is putting top priority on wringing inflationary expectations out of the economy, believing this to be critical to long-run economic growth. Consequently, the Government set the 1984 budget slightly below 1983 levels, and plans to fight price increases through a combination of tight monetary policy, measures to discourage real estate speculation, and efforts to encourage wage restraint and increased productivity. To help reduce Government deficits, the MAF will continue the freeze on the rice purchase price in 1984, but has decided to offset this partially by also freezing fertilizer prices for the year. Because of large carryin stocks, the Government will not pressure farmers to plant HYV's this year, but will allow them to choose freely between HYV's and traditional varieties. Increased planting of traditional varieties is expected, which should lower potential average yields slightly. However, this should also help reduce the vulnerability of the crop to insects and diseases, and will help enhance consumer acceptance.

Feed Grain Imports Will Fall in 1984

Estimates for South Korea's major agricultural import categories are shown in table 13. The decline in hog numbers expected in 1984 will substantially reduce Korea's corn imports. Stronger U.S. prices will lead to a slight drop in the U.S. market share of corn and sorghum, as Korea shifts some of its purchases to other suppliers. Soybean imports will increase considerably, reflecting growing consumer demand for soy-based foods and oil, as well as demand for meal from feed mixers. The import mix will probably shift from meal toward soybeans, which will favor the United States.

Cattle imports will fall slightly in 1984, but the U.S. share will decline sharply because the preference for air-freight shipments of breeder cattle has been cancelled. Beef imports will decline somewhat, with increased domestic production satisfying demand growth. The U.S. share will remain limited to the small tourist hotel market for high-grade beef.

Exports of Korean textiles and clothing are expected to rise marginally in 1984 in response to improved demand

Table 13.—Korea: Selected agricultural imports, calendar years.

Commodity	1983		1984 estimates	
	Total	U.S. share	Total	U.S. share
	1,000 tons			
Cotton	340	287	345	276
Corn	4,163	4,052	3,300	3,140
Sorghum	178	53	250	120
Wheat	1,980	1,958	2,360	2,060
Rice	221	221	0	0
Cattle hides	150	135	160	144
Wool	29	0	28	0
Soybeans	680	680	850	850
Soybean meal	340	90	250	80
Cattle(1,000 No.)	80	30	73	5
Beef	65	1	55	1
Inedible tallow	140	83	160	96
Natural rubber	130	0	134	0
Palm oil	96	0	90	0
Tobacco	2	0	2	0

Sources: FAS, ERS estimates.

in the industrialized countries and reduced competition from Pakistan. This should raise imports of raw cotton somewhat. However, U.S. export prices remain high, and no further GSM-102 credit guarantees for FY 84 are currently available to Korea. These factors will lead to a further decline in the U.S. share of the raw cotton market in 1984, estimated here at 80 percent. [*Donald A. Sillers, (202) 447-8229*]

TAIWAN

Economic Recovery in 1983

Taiwan's economy experienced a sharp turnaround in 1983, following a year of relatively slow 3.9-percent real growth in 1982. Its momentum was sparked by an improved U.S. economy and the general worldwide recovery, with the Government estimating real GNP growth at 7.1 percent. Per capita income rose 5 percent to $2,673. Taiwan's industrial production reflected the overall recovery, expanding 14 percent compared with only 1.8 percent in 1982.

Inflation, as measured by the Consumer Price Index (CPI), was 2 percent in 1983, while wholesale prices actually declined. The average rate of unemployment remained below 2.5 percent. The minimum wage was raised in mid-1983 and new vocational policies were adopted to reduce unemployment.

Foreign investment approvals dropped 4 percent in 1982, but rebounded in 1983, rising 5 percent to about $400 million. In early 1983, the Government projected that foreign investment approvals would increase 30 percent over 1982, but the approval of two large-scale joint ventures was delayed and investors showed reluctance to invest in capital intensive projects. Foreign investors find Taiwan attractive because labor costs are still low by European and U.S. standards, and because Taiwan provides incentives such as tax holidays, accelerated depreciation, low interest loans, and duty rebates—especially in strategic industries.

Trade Rebounds Strongly

Taiwan's total trade was about $45.4 billion in 1983, with a trade surplus of $4.8 billion. Total trade had fallen 6.2 percent to $41.1 billion in 1982, and the 10.5-percent jump in 1983 was aided by the gradual ending of the domestic and global recession. Exports responded quickly to the U.S. recovery, with exports to the United States climbing 28 percent. Total export growth for 1983 was 13.1 percent. Textiles, electric and electronic items, footwear, and sporting goods continued as Taiwan's dominant export items, accounting for over 52 percent of total exports.

Imports did not respond to the recovery as fast as exports, lagging behind until the fourth quarter of 1983, when they rose 11.2 percent. Total imports increased 7.4 percent in 1983, following an 11-percent decline in 1982. The current account surplus for 1983 was estimated at about $5 billion, more than double last year's figure. Taiwan's debt-service ratio was less than 8 percent.

Trade Surplus With the United States Grows

Taiwan was the 15th largest U.S. export market, 6th largest source of imports, and 7th largest two-way trading partner. The United States was Taiwan's largest two-way trading partner, the largest purchaser of Taiwan's exports, and the second largest supplier of Taiwan's imports. During 1983, the United States accounted for about 45 percent ($11.3 billion) of Taiwan's exports, compared with 39.6 percent ($8.8 billion) in 1982. Imports from the United States were valued at $4.45 billion in 1983, marginally below the previous year. Taiwan's trade surplus with the United States rose from $3.4 billion in 1981 to $4.2 billion in 1982 and to 6.9 billion in 1983.

To reduce the trade surplus, Taiwan has sent eight "Buy American" missions to the United States since 1978. Those missions undoubtedly resulted in some incremental imports. The eighth mission visited the United States at the end of 1983 and signed contracts valued at $650 million. Total purchases under all missions came to about $6.6 billion.

Agricultural Production Rose in 1983

Agriculture continues to decline in importance in Taiwan's economy, with its contribution to net domestic product falling from 14.9 percent in 1975 to 9.3 percent in 1980 and about 7.5 percent in 1983. The decline is expected to continue in 1984. In 1983, total agricultural production increased marginally. Unseasonal, nearly continuous rains during the first 3 months of 1983 caused heavy damage to vegetable and fruit crops, contributing to a 1-percent decline in crop production (table 14). The marginal increase in total agricultural production is attributed to brisk sales of swine and poultry, and to marked increases in fishery and aquaculture production. Swine production was stimulated by stronger export demand because of Japan's ban on imports of Danish pork during March 1982-September 1983 following an outbreak of swine hoof-and-mouth disease in Denmark. Favorable weather aided coastal fishing activities, and improved techniques yielded greater acquaculture output, with that sector growing 6.0 percent.

Table 14.—Taiwan: Production of selected agricultural commodities

Commodity	1982	1983	1984	Share of total production[1]
		1,000 tons		*Percent*
Rice	2,234	2,268	2,000	22
Pork	527	588	550	21
Poultry meat	293	319	350	15
Vegetables	3,021	2,721	3,200	11
Eggs	160	170	180	6
Sugarcane	8,275	7,023	7,000	5
Total				80

[1]Based on 1983 production and 1969-71 average producer prices.

Sources: Government of Taiwan; FAS; ERS estimates.

Rice is by far the major food crop in Taiwan, with about 80 percent of the nation's farmers involved in rice cultivation. High guaranteed purchase prices for a portion of each farmer's crop and lack of profitable crop alternatives have kept production well above domestic requirements in recent years.

As early as 1977, when it became apparent that domestic rice consumption was on the decline and that world market conditions were not favorable for the expansion of rice exports, the Government initiated programs to encourage farmers to replace rice with other crops, such as corn, soybeans, sorghum, and barley. These programs have a twofold purpose: To reduce rice stocks and to reduce the deficits the Government incurs by purchasing rice at prices higher than the market price.

However, the Government efforts have been somewhat less than successful. Farmers have already established highly successful rice planting and harvesting methods and feel more secure planting their traditional rice crops. In addition, mechanized methods of planting other cash and specialty crops are not as highly developed as those for rice; therefore, they require more manual labor. The present shortage of labor in agricultural areas has made farmers less willing to plant other crops. Also, farmers who are raising corn, sorghum, barley, and soybeans have difficulty competing effectively with foreign imports.

Further showing its commitment to reduce rice production, the Government announced in October 1983 a new "payment-in-kind" (PIK) program, which is similar to the U.S. program. It attempts to divert 4,400 hectares of paddy land to other crops. For each set-aside hectare, a farmer will receive 1,500 kgs. (or title share to) of paddy rice. In addition, approved crops such as corn, sorghum, and soybeans grown on the set-aside land will be purchased by the Government at guaranteed prices. Despite the Government's efforts to reduce rice production in 1983, rice output was 2.3 million tons, up slightly from the 2.2 million produced in 1982, and much higher than the Government's target of 2.0 million tons.

Sugarcane Harvest Down

Sugar is a major cash crop and an important export commodity. Sugarcane output dropped to 7.0 million tons

during 1983, the lowest in 12 years. The sharp decline resulted from a ban on riverbed use that reduced planted area, and from a comparatively longer growing period on other land. During the past 10 years, a total of about 10,000 hectares of cane area has been converted to growing other, more profitable, crops. In addition, some cane fields have been sold for industrial use.

Corn Production Up

In 1983, corn production increased 6 percent to 125,000 tons. Despite Government efforts to rapidly boost corn output by raising guaranteed prices and reducing taxes, farmers have not fully responded to those incentives. The reasons: Imported corn is cheaper than domestically produced corn, and the land that the Government would like to plant to corn comes from existing riceland. The switch from rice to corn requires a substantial capital outlay, as well as the availability of new types of inputs and technical expertise.

Soybean Production Down

Because of the prolonged rainy season in southern Taiwan, where most soybeans are grown, the 1983 soybean crop was damaged and production declined marginally to 12,000 tons. Also, high production costs and less-than-satisfactory returns continued to make soybean production relatively unattractive to Taiwanese farmers.

Fruit and Vegetable Production Mixed

Taiwan produces a diversity of vegetables, including substantial quantities of asparagus, mushrooms, tomatoes, potatoes, onions, and cabbage. Total vegetable production is estimated to have decreased about 10 percent in 1983, because of heavy rain damage early in the year. Only small quantities of fresh vegetables are exported. However, canned bamboo shoots, asparagus, tomatoes, and mushrooms are produced in sufficient quantities to be exported.

Taiwan's total fruit production increased from 1.72 million tons to 1.75 million in 1983. Citrus output was up slightly to 395,000 tons. Taiwan usually exports small quantities of citrus fruits to Singapore, Hong Kong, Indonesia, and Malaysia. Because of the inferior quality of local citrus, Taiwan consumers prefer imported oranges, most of which come from the United States.

Bananas and pineapples are also important fruits. Production of both has declined in recent years as export markets have been lost to competing countries. Production of bananas and pineapples was up slightly to 210,000 tons and 150,000 tons, respectively, in 1983.

Livestock Output Rises

For the last 10 years, the livestock sector has steadily gained importance in Taiwan. Livestock's share of total agricultural production increased from 26 percent in 1972 to 38 percent in 1983. During that period, the sector grew at an annual rate of more than 6.5 percent, while the farm sector, as a whole, grew at about 2 percent annually. Within the livestock sector, the average annual increase between 1973 and 1983 of chicken slaughter was about 11 percent, followed by duck, at 7 percent; swine, over 4 percent; and cattle, at 2.5 percent.

Hog raising is a major activity on many Taiwanese farms and is the major source of the country's meat supply. Swine raising ranks second only to rice, accounting for 21 percent of the total value of agricultural production in 1983. Lower prices for feeds, particularly imported feed grains, and relatively higher selling prices for hogs toward the end of 1982 led to increased swine production in 1983. The opening of the Japanese market to Taiwnese pork following Japan's ban on Danish pork contributed to more remunerative pork prices. Total meat production (hog and beef) increased sharply from 529,000 tons in 1982 to almost 600,000 in 1983, with beef accounting for only a minor part of total output.

Poultry production accounted for about 15 percent of the total value of agricultural output in 1983, and has been one of the fastest growing components of the farm sector. Almost all the poultry meat is consumed domestically, with only small quantities exported to Hong Kong and Singapore. Consumption of all poultry meats (chicken, duck, geese, and turkey) rose sharply to 320,000 tons, up 9 percent from 1982. The duck is becoming increasingly important to farmers, not only for its meat, but also because of its feathers, which are used in the garment industry. Duck production reached a new high of about 35 million birds in 1983.

Taiwan's total milk output showed some increase from 56,000 tons in 1982 to 58,000 tons in 1983. Domestic milk production meets only 10 percent of the country's demand. The remaining 90 percent is imported in the form of condensed and dry milk, mostly from Australia, Denmark, the EC, and the United States.

Agricultural Trade Deficit Widens As Exports Drop

Although Taiwan's total export earnings rose considerably in 1983, its exports of major agricultural commodities showed a sharp decline. Earnings from farm exports tumbled more than 17 percent to $399 million. Sugar, bananas, canned and fresh mushrooms, asparagus, pineapple, vegetables, and pork were the major 1983 farm exports. Exports of most farm products, with the exception of frozen pork and citrus fruits, fell sharply. Sales of sugar, normally the major export commodity, declined almost 54 percent to $45 million because of stiff competition with other sugar exporters. Also, Taiwan's three major sugar markets—Japan, South Korea, and the United States—reduced their import quotas of sugar from Taiwan. Frozen pork became the most valuable export commodity in 1983 as sales to Japan reached an alltime high of $110 million, compared with $67 million in 1982 and $71 million in 1981.

Mushrooms, the second most valuable export commodity in 1983, brought foreign exchange earnings of $70 million, down $18 million from the previous year. Even though Taiwan has upgraded its techniques in packaging and canning mushrooms, problems remain. In March 1983, Australia got a contaminated shipment of canned mushrooms, which was a severe blow to Taiwan's mushroom farming and canning industry. The major buyers of Taiwan's mushrooms were Canada, West Germany, the United States, Japan, Hong Kong, and Singapore.

Asparagus, traditionally the second leading export commodity, slipped to third place in 1983 as production fell

because of wet weather. Earnings from asparagus shipments dropped sharply from $88 million in 1982 to $60 million in 1983. Major buyers were West Germany, the Netherlands, the United States, and France.

Rice is not a traditional export commodity, but for the last few years, it has been exported to reduce burdensome stocks and provide room for storage of imported grains. Rice exports totaled 550,000 tons in 1983, with about 70 percent going to Indonesia.

Taiwan's exports of other major commodities during 1983 included vegetables, valued at $60 million; bananas, $33 million; tea, $18 million; citrus fruits, $15 million; and pineapples, about $6 million.

Farm Imports Off Marginally

Taiwan's imports of major agricultural commodities declined from $1.6 billion in 1982 to $1.5 billion in 1983. Except for corn and soybeans, the value of other major imports fell. Cotton purchases dropped more than 28 percent to $267 million. Because of relatively high world cotton prices and ample cotton stocks following large imports in 1982 and early 1983, Taiwan reduced its cotton purchases in 1983 to save foreign exchange.

To support a growing livestock industry, Taiwan's corn imports have been increasing steadily in recent years. In 1983, corn imports reached a record 3 million tons, valued at $415 million, compared with 1982's 2.5 million tons, at $365 million. Import demand for feed, particularly corn, received an additional stimulus in 1983 from the increase in pork production to meet Japanese demand. While imported sorghum was used extensively in hog feeding during 1982 because of its low relative price, this was not the case in 1983. Sorghum imports declined about one-third in value, to $65 million from $97 million in 1982.

Oilseed imports have grown rapidly in recent years. Soybeans predominate, comprising more than 95 percent of Taiwan's total oilseed imports. Soybean purchases rose more than 11 percent in volume to 1.28 million tons, and 9 percent in value to $360 million in 1983, compared with 1.15 million tons valued at $331 million in 1982. Increased production of swine, chicken, duck, and eels, and expanded edible oil consumption were the basis for larger soybean imports. The Government anticipates soybean imports will continue to grow along with the population and demand for livestock products. Other major imported commodities were wheat, valued at $134 million; cattle hides and skins, $98 million; tobacco, $67 million; barley, $53 million; and tallow, $17 million.

U.S. Exports Rise

Taiwan is one of the leading U.S. customers for farm products in East Asia. Total U.S. agricultural exports to Taiwan during FY 83 reached $1.24 billion, up over 6 percent from FY 82. Major U.S. agricultural commodity exports to Taiwan in FY 83 were corn, soybeans, wheat, cotton, tobacco, dried fruits, and dairy products. Corn remained on top, rising sharply to a value of $381 million, up more than 50 percent from FY 82. U.S. corn sales increased because of Taiwan's expanded hog production, and competitive U.S. corn prices. Cancellation of planned imports of Thai corn, which was of inferior quality, and reduced availability of corn from South Africa also helped boost U.S. corn shipments. U.S. soybean exports were a record 1.4 million tons, valued at $336 million in FY 83, up 34 percent in volume and 18 percent in value from the previous year. Total soybean use rose sharply because of strong feed demand and continued growth in demand for soybean oil for human consumption. Soybean use is expected to keep increasing in the future because of planned expansion of the livestock, poultry, and dairy industries.

Limited availability and relatively high prices for U.S. cotton caused U.S. cotton sales to Taiwan to fall 56 percent in volume and 55 percent in value in FY 83. U.S. cotton exports in FY 83 were 77,000 tons, valued at $96 million. Taiwan's large carryin stocks following record cotton imports in 1982, and lower prices offered by other suppliers, contributed to the decline in U.S. sales in FY 83.

U.S. wheat exports to Taiwan dropped from 663,000 tons in FY 82 to 609,000 tons in FY 83, primarily because of Taiwan's continued efforts to diversify its sources of supply. Canada has been providing more competition in the Taiwanese wheat market, boosting its sales from about 28,000 tons in FY 82 to about 57,000 tons in FY 83.

In recent years, U.S. agricultural imports from Taiwan have been increasing at a steady pace. But in FY 83, partially because of sugar quota limitations, farm imports from Taiwan declined from $176 million to $165 million. Sugar, canned mushrooms, canned fruits (pineapple) and canned vegetables (primarily asparagus) are the major commodities imported from Taiwan. Sugar imports from Taiwan fell 45 percent in volume and 30 percent in value to $11.3 million in FY 83 primarily because of a reduction in the U.S. import quota for Taiwan's sugar from 25,643 tons to 13,153 tons. U.S. imports of canned vegetables and fruits together dropped marginally from $107 million in FY 82 to $104 million in FY 83.

Economic Outlook Bright

Prospects for Taiwan's economy in 1984 are generally bright, but actual growth will depend heavily on the economic performance of its major trade partners—the United States, Western Europe, Japan, and Hong Kong. Economic recovery in the United States has had a strong influence on Taiwan's recent economic gains. The Taiwanese Government is optimistic that this trend will extend well into 1984, and has targeted 1984 real growth at 7.5 percent. Inflation rate targets are set at 4 percent for consumer prices, and 2 to 3 percent for wholesale prices. Employment may increase 4 percent, while unemployment is estimated to be 2 percent in 1984. Wages may tend to rise and, perhaps, further erode Taiwan's competitive edge in exports from labor intensive industries.

The momentum in the economy should cause upturns in investment and imports as inventories are depleted and production facilities reach capacity. Increased imports should help shrink the trade surplus, which in turn, should relieve some of the pressure that has produced an overexpanding money supply. Estimates for real investment show an increase of 8.7 percent for the private sector and a decline of about 6 percent for the public sector.

Merchandise exports are expected to rise about 15 percent and imports are projected to grow 16 percent. Taiwan's trade surplus for 1984 is estimated at about $5 billion.

Total agricultural production is projected to increase only 1 percent in 1984, down from 1983's near 2-percent growth. The target for 1984 rice production is again set at 2 million tons, down from last year's production of 2.4 million, as the Government continues its effort to divert rice area to other crops, including corn and soybeans. Some decline in area planted to rice is expected in response to the recently announced PIK program.

Sugarcane production is likely to decline in 1984, because of high stocks and lower prices brought about by the decline in sugar exports in 1983. Taiwan's major fruit and vegetable exports may fall slightly because of competition and slack demand. Fishery production should grow because of increased Government funding to improve fishing conditions.

Demand for meats and poultry, wheat products, and soybean products will likely increase faster in 1984, because of a projected 5.7-percent real increase in per capita income. Growth in domestic demand is expected to result in imports of about 3.5 million tons of corn, 700,000 tons of wheat, and 1.5 million tons of soybeans and 240,000 tons of cotton in 1984. In addition, Taiwan's imports of tobacco, tallow, hides and skins, and other farm commodities are also expected to rise. Continuing as a major supplier of most of Taiwan's agricultural imports, the United States is expected to provide 99 percent of soybean imports, 89 percent of corn, 88 percent of wheat, and 40 percent of cotton. [*Amjad H. Gill, 202 447-8229*]

High-Value Agricultural Import Trends In East Asia[1]

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Abstract: HVP's account for a growing share of total farm imports in East Asia, despite trade barriers for many HVP's. The United States has maintained its share of this trade despite protectionism and competition from the EC and neighboring Asian countries. East Asia's strong economic performance and limited indigenous capacity to produce many HVP's portends rising import demand for HVP's during the 1980's, with potential growth in U.S. trade opportunities.

Keywords: High-value agricultural products, Hong Kong, Japan, South Korea, Taiwan, trade barriers, market share, food consumption patterns.

U.S. Share of East Asia Market Up

Production and trade of HVP's tend to affect a country's employment and income more than relatively unprocessed and low-value agricultural products. Because of foreign exchange and domestic welfare considerations, exporting countries try to maximize HVP trade, while importing nations, as in East Asia, attempt to maximize domestic production of many HVP's. The importance of this can be seen in the fact that the growth rate in East Asia's imports of HVP's was more than twice the growth rate of imports of low-value agricultural products in the late 1970's and early 1980's. By 1982, a half-decade of more than 13-percent annual growth boosted the value of East Asia's imports of HVP's to $16.2 billion. HVP's comprised 54 percent of all agricultural imports in 1982, compared with 47 percent 5 years earlier. East Asia accounted for nearly 11 percent of world HVP imports in 1982. Although this is about equivalent to its share of world GNP, it is nearly three times its share of world population.

The United States increased its share in the East Asian HVP market to 22.8 percent in 1982, compared with 18.5 percent in 1977, with substantial gains in Japan and Taiwan offsetting losses in Hong Kong and South Korea (tables 15-18). Success in buttressing the U.S. share of the East Asia HVP market contrasts with stagnating U.S. HVP exports to the rest of the world.

Exports of developing countries, led by the PRC, South Korea, and Thailand, were also brisk, because these nations exploited their comparative advantages in producing fresh fruit, processed fruits and vegetables, and livestock products, respectively, to satisfy demand in East Asian markets. The United States is expected to face increasingly stiff competition later in the 1980's from the EC and Asian developing countries for the attractive, high-growth East Asian market.

Export for Hong Kong, East Asian markets remain protected by tariff and nontariff barriers across a wide front. Japan, for example, maintains import quotas on 19 agricultural commodities. Tariff and nontariff barriers on livestock products and fruit, in particular, have reduced growth in HVP trade with Japan and South Korea.

[1]HVP's include all commodity groups shown in tables 15-18. All other commodity groups were classified as low-value agricultural products. See *High-Value Agricultural Exports: U.S. Opportunities in the 1980's*. U.S. Department of Agriculture, 1983 for an assessment of world trends.

Many of the factors that encouraged growth in East Asian imports of HVP's may continue through the remainder of the 1980's, though at a somewhat slower pace. Small declines in expected GNP growth rates will likely lower annual increases in HVP imports from 13 percent to 8-10 percent. Per capita consumption in Japan and Hong Kong is reaching saturation for some commodities, and Japan, as well as South Korea and Taiwan, are promoting their local HVP processing capacity. However, import demand created by further upgrading of diets (particularly in South Korea), and of apparel, may offset slower or negative growth in import demand for items that are less income elastic, including vegetable oils, hides, coffee, and tea.

The United States will require policy initiatives to meet the challenge of the market development efforts of the EC and of developing exporters in the East Asian market. To be successful, such initiatives will probably call for aggressive sales promotion. These are especially needed in markets where the United States has developed a large share because of competitive advantages, but where this market share is now threatened by competitors' export subsidies. Subsidized EC exports of poultry meat to Hong Kong in 1983, with 8- to 10-percent markdowns, are a good example of such a threat.

Demand Patterns for HVP's

East Asia is a major importer of HVP's because of high income growth, changing diets, and most importantly, a substantial shortfall between domestic production and demand for many HVP's. The shortfall is caused primarily by lack of indigenous capacity to produce many high-value unprocessed and semiprocessed commodities. Therefore, East Asian imports comprise a relatively large proportion of such commodities as meat, milk and cream, fresh fruits, and tropical products.

East Asian consumption of most HVP's is relatively low compared with Western standards. Diets have traditionally emphasized cereals (especially rice), fish, and roots and tubers. For example, per capita consumption of meat in East Asia in 1981 averaged 22.9 kgs., with a low of 11.0 in South Korea and a high of 64.1 in Hong Kong. By comparison, per capita meat consumption topped 100 kgs. in the United States. A similar pattern of consumption relative to the West exists for most other high-volume, high-growth HVP imports into East Asia, including fruits, dairy products, miscellaneous food products, and beverages.

Table 15.—Hong Kong imports of HVP's

Commodity	1977	1982	Growth rate[1]	1983[2]	Major suppliers in 1982	U.S. rank	
						1977	1982
	Million dollars					*Rank*	
Meat, frsh, chlld, frzn	130	218	+	221	PRC, US, Aust.	2	2
Meat, drd, sltd, smkd	28	20	–	18	PRC, Den., Bel-lux	11	5
Meat, tnnd, NES, prp.	34	50	+	53	PRC, Sing., Den.	4	5
Milk & cream	37	63	+	62	Aust., Neth., Den.	3	4
Cheese & curd	2	5	+	6	Aust., NZ, Fin.	–	–
Eggs	70	67	–	58	PRC, US, Indo.	2	2
Fresh fish	191	312	–	288	PRC, Japan, Thai.	13	13
Fish, etc., tnnd, prprd	21	83	+	83	Aust., PRC, Mex.	1	6
Cereal preparations	34	60	+	61	PRC, Japan, Aust.	12	8
Fruit, frsh; nuts, frsh & dry	162	70	+	258	US, PRC, Thai.	1	1
Fruit, prsrvd, prprd	25	51	+	43	PRC, US, Sing.	2	2
Vegetables, frsh, smply prsrvd	80	38	+	134	PRC, US, Thai.	2	2
Vegetables, prprd prsrvd	67	134	+	153	PRC, Japan, US,	3	3
Vegetable oil residues	6	16	+	23	PRC, Thai., S. Africa	7	7
Meat or fish meal fodder	4	13	+	8	Peru, Chile, NZ	7	7
Carbohydrate-source fdstffs	31	40	+	44	US, Thai., Sing.	1	1
Misc. food preparations	47	87	+	95	US, PRC, Japan	1	1
Tobacco manufactures	54	139	+	136	US, UK, Neth.	1	1
Hides & skins, undressed	10	11	–	8	Aust., US, Syria	2	2
Fur skins, undressed	2	24	+	35	UK, Den., PRC	4	4
Crude animal matter, NES	45	49	–	74	Bel-lux, PRC, USSR	7	7
Crude vegetable mat. NES	187	241	–	238	PRC, US, Indo.	2	2
Fixed vegetable oils & fats	53	64	–	73	S. Africa, PRC, Can.	6	7
Leather	53	93	+	101	Taiwan, Japan, US	3	3
Fur skins, tnnd or drssd	51	106	+	123	UK, US, PRC	2	2
Other[3]	184	302	–	309	PRC, France, UK	–	–
Total HVP agric. imports	1,608	2,656		2,705			
Total agric. imports[4]	2,469	3,517		3,570			
HVP/Total agric. imports (%)	65.1	75.5		75.8			
U.S. share of HVP imports (%)	18.6	16.4		NA			

Note: – = Zero or negiligible.

[1]+ = Above average; – = below average, for all HVP's imported into Hong Kong for 1977-1982. Average annual growth rate for HVP's is 13.0 percent; for total agricultural imports, 8.5 percent. [2]Preliminary. [3]Includes butter, wheat and nonwheat flour and meal, sugar preparations, coffee, cocoa, chocolate products, tea and mate, spices, beverages, and animal fats and oils. [4]Agricultural commodities listed in UN trade runs, plus fish; leather; and furskins, tanned or dressed.

Sources: UN trade data, official Hong Kong trade statistics, and ERS estimates.

Consumption of HVP's is also generally low in South Korea relative to Taiwan, Hong Kong, and Japan, reflecting lower per capita income, relatively high consumption of traditional cereals, and a lower stage of development in many economic sectors. The lower development stage is particularly evident in South Korea's livestock sector. In 1981, per capita milk consumption in South Korea was only 13.2 kgs., less than one-half the level in Japan.

The consumption pattern for HVP's in East Asia is determined by the prices of HVP's and substitutes, real income, tastes and preferences, and Government policy.

Prices of HVP's Tend To Rise

Prices of HVP's in East Asia are strongly influenced by each nation's degree of self-sufficiency for various HVP's and their substitutes. In general, East Asian nations possess low degrees of self-sufficiency for the HVP's shown in tables 15-18. For example, beef and dairy operations, in contrast to poultry and swine, not only entail high startup costs and long payback periods, but also compete directly with essential food grain production for forage land, grazing land, and feeding space. Thus, prices for many HVP's in East Asia are rising at a pace greater than the general cost of living, and a large proportion of beef, dairy products, and other HVP's must be imported to satisfy growing domestic demand.

Furthermore, the prices of many domestically produced HVP's, which substitute for HVP imports, rose markedly in the last half decade. An increase in the price of fish, the most important HVP traded in East Asia, was among the more general and significant trends. In contrast to the region's relatively poor livestock base, substantial fishery resources historically translated into high consumption of fish. Per capita consumption of fish in 1982 averaged close to 35 kgs., making fish the major source of animal protein and the major protein substitute for livestock products in East Asia. However, a growing gap between production and demand for most marine species in the last half decade, not only raised imports of fish, but also raised the price of fish relative to livestock products. For example, the growth rate of fish prices was four times faster than meat prices in Japan, and twice as fast as meat prices in Taiwan. Hence, consumption of meat was encouraged, including imports of livestock products that could not be produced locally. Similar substitution trends took place for several other HVP's produced domestically.

Table 16.—Japan imports of HVP's

Commodity	1977	1982	Growth rate[1]	1983[2]	Major suppliers in 1982	U.S. rank	
						1977	1982
	Million dollars					*Rank*	
Meat, frsh, chlld frzn	914	1,637	+	1,711	US, Aust., Can.	2	1
Meat, drd, sltd, smkd	11	13	–	13	Aust., US, NZ	3	2
Meat, tnnd, NES, prprd	33	57	+	53	Aust., Den., US	3	3
Milk & cream	43	116	+	94	W. Ger., NZ, UK	5	10
Cheese & curd	86	147	+	126	Aust., NZ, Den.	6	6
Eggs	77	32	–	18	US, S. Korea, PRC	2	1
Fresh fish	2,076	3,723	+	3,650	US, S. Korea, PRC	2	1
Fish, etc., tnnd, prprd	119	213	+	217	Taiwan, S. Korea, Thai.	4	9
Cereal preparations	167	260	–	250	Aust., Can., W. Ger.	9	10
Fruit, frsh; nuts, frsh & dry	420	801	+	824	US, Phil., PRC	1	1
Fruit, prsrvd, prprd	104	156	+	162	US, S. Korea, PRC	1	1
Vegetables, frsh, smply prsrvd	261	430	–	409	US, S. Korea, PRC	3	1
Vegetables, prprd, prsrvd	118	104	–	114	Taiwan, US, S. Korea	1	2
Vegetable oil residues	108	27	+	68	US, Brazil, S. Korea	1	1
Meat or fish meal fodder	158	69	–	104	Aust., Peru, Chile	11	10
Carbohydrate-source fdstffs	88	127	+	141	US, PRC, India	1	1
Misc. food preparations	72	230	+	218	US, N.Z., Bel-Lux	1	1
Tobacco manufactures	33	76	–	91	US, UK, Hong Kong	1	1
Hides & skins, undressed	324	350	–	362	US, Aust., NZ	1	1
Fur skins, undressed	23	86	+	50	Fin., US, Norway	3	2
Crude animal matter, NES	135	278	+	289	PRC, US, Aust.	2	2
Crude vegetable mat., NES	160	472	–	530	PRC, US, S. Korea	3	2
Fixed vegetable oils & fats	139	243	–	224	Malaysia, Phil., US	3	3
Leather	51	62	–	61	India, US, Pakistan	2	2
Furskins, tnnd or drssd	124	269	+	176	Hong Kong, S. Korea, US	2	3
Others[3]	1,372	1,418	–	1,358	Brazil, UK, US	–	3
Total HVP agric. imports	7,216	11,396	11,313				
Total agric. imports[4]	14,938	20,564	20,782				
HVP/Total agric. imports (%)	48.3	55.4	54.4				
U.S. share of HVP imports (%)	17.1	23.3	NA				

Note: – = Zero or negligible.

[1]+ = Above average; – = below average, for all HVP's imported into Japan for 1977-1982. Average growth rate for HVP's is 11.6 percent; for total agricultural imports 7.5 percent. [2]Preliminary. [3]Includes butter, wheat and nonwheat flour and meal, sugar preparations, coffee, cocoa, chocolate products, tea and mate, spices, beverages, and animal fats and oils. [4]Agricultural commodities listed in UN trade runs, plus fish; leather, and furskins, tanned or dressed.

Sources: UN trade data official Japanese trade statistics, and ERS estimates.

Table 17.—Korea imports of HVP's

Commodity	1977	1982	Growth rate[1]	1983[2]	Major suppliers in 1982	U.S. rank	
						1977	1982
	Million dollars					*Rank*	
Meat, frsh, chlld, frzn	32	159	+	160	Aust., US, Sweden	3	2
Milk & cream	2	11	+	11	Neth., Aust., NZ	3	5
Fresh fish	13	55	+	43	US, Japan, Canada	1	1
Cereal preparations	—	5	+	1	Aust., Phil., Thai.	—	4
Fruit, frsh; nuts, frsh or dry	2	11	+	10	US, Japan, PRC	6	1
Fruit prsrvd, prpard	2	9	+	12	US, Brazil, Phil.	1	1
Vegetables, frsh, smply prsrvd	2	23	+	22	Thai., PRC, US	6	3
Vegetables, prprd, prsrvd	1	3	+	6	PRC, US, Thai.	3	2
Vegetable oil residues	6	31	+	70	US, Brazil, Canada	—	1
Meat or fish meal fodder	3	1	–	5	Peru, US	4	2
Carbohydrate-source fdstffs	—	3	+	9	Canada, US, Japan	1	2
Misc. food preparations	4	8	–	8	US, Japan, UK	1	1
Hides & skins, undressed	130	180	–	193	US, Canada, Aust.	1	1
Fur skins, undressed	14	53	+	58	Fin., W. Ger., France	3	7
Crude animal matter, NES	23	50	–	64	US, Japan, PRC	1	1
Crude vegetable mat., NES	13	32	+	34	PRC, Indo., US	4	3
Fixed vegetable oils & fats	6	64	+	73	Malaysia, Phil., US	3	3
Leather	115	279	–	308	Japan, US, Arg.	2	2
Furskins, tnnd or drssd	9	33	+	31	Finland, US, Japan	2	2
Others[3]	95	137	–	130	US, NZ, Aust.	—	1
Total HVP agric. imports	472	1,147		1,248			
Total agric. imports[4]	1,726	2,617		2,967			
HVP/Total agric. imports (%)	27.3	43.8		42.1			
U.S. share of HVP imports (%)	41.2	33.2		NA			

Note: — = Zero or negligible.

[1]+ = Above average; – = below average, for all HVP's imported into South Korea, for 1977-1982. Average annual growth rate for HVP's is 28.6 percent; for total agricultural imports 10.3 percent. [2]Preliminary. [3]Includes wheat flour, coffee, cocoa, spices, beverages, and animal oils and fats. [4]Agricultural commodities listed in UN trade runs, plus fish, leather, and furskins, tanned or dressed.

Sources: UN trade data, official South Korean trade statistics, and ERS estimates.

Table 18.—Taiwan imports of HVP's

Commodity	1977	1982	Growth rate[1]	1983[2]	Major suppliers in 1982	U.S. rank	
						1977	1982
	Million dollars					*Rank*	
Meat, frsh, chlld, frzn	6	60	+	66	Aust., US, NZ	2	2
Milk & cream	70	130	–	131	Aust., NZ, US	5	3
Cheese & curd	—	1	+	1	NZ, Aust., US	2	3
Fresh fish	27	40	–	48	Japan, S. Korea, US	2	3
Fish, etc., tnnd, prprd	—	4	+	4	Chile, Japan, S. Korea	4	4
Cereal preparations	5	10	–	12	Belgium, UK, Thai.	7	7
Fruit frsh; nuts, frsh, or dry	8	48	+	56	US, S. Korea, Can.	1	1
Vegetables, frsh, smply prsrvd	15	24	–	19	Thai., US, Aust.	2	2
Sugar prep., non-chocolate	3	13	+	18	Phil., Indo., Italy	4	4
Vegetable oil residues	22	3	–	2	Japan, Thai., Phil.	—	—
Meat or fish meal fodder	65	139	–	136	Japan, US, Chile	3	2
Misc. food preparations	5	22	+	22	US, Canada, Japan	1	1
Tobacco manufactures	2	3	–	4	UK, US, Japan	2	2
Hides & skins, undressed	38	106	+	139	US, Canada, Japan	1	1
Crude vegetable mat.	52	159		2,127	Hong Kong, Indo., S. Korea	4	4
Fixed vegetable oils, soft	6	16	+	23	Canada, Sing., US	5	3
Leather	37	46	–	64	Japan, Hong Kong, US	2	3
Furskins, tanned or dressed	1	2	–	2	W. Ger., NZ, Spain	3	4
Others[3]	56	112	–	85	US, Thai., Neth.	—	1
Total HVP agric. imports	431	972		1,005			
Total agric. imports[4]	1,425	3,110		2,926			
HVP/Total agric. imports (%)	30.2	31.3		34.3			
U.S. share of HVP imports (%)	16.4	22.7		NA			

Note: — = Zero or negligible.

[1]+ = Above average; – = below average, for all HVP's imported into Taiwan for 1977-1982. Average annual growth rate of HVP's is 25.1 percent; for total agricultural imports 23.6 percent. [2]Preliminary. [3]Includes butter, wheat and nonwheat flour and meal, coffee, cocoa, spices, beverages, and animal oils and fats. [4]Includes forestry products.

Source: Official Taiwanese trade statistics, and ERS estimates.

Income Growth Boosts Demand for HVP's

GNP growth rates averaged about 4.7 percent from 1977 to 1983, ranging from 8.7 in Hong Kong to 4.4 in Japan. In general, the demand for HVP's in East Asia is income elastic; ranging from +.5 to +2, compared with an income elasticity of -0.1 to +0.5 for the lower value agricultural commodities. Given the limited capacity of affluent and newly affluent East Asian nations to meet the HVP demand generated by rising per capita incomes, high income elasticities translate into strong import demand for most HVP's.

Improved and Diversified Diet Encourages HVP Demand

A typical East Asian diet includes large amounts of rice and fish, with cereals averaging 53 percent of daily caloric intake, ranging from 75 percent in South Korea to 36 percent in Hong Kong. Consumer exposure to the more diversified and high-quality (in protein and convenience of preparation) Western dietary patterns of HVP consumption is increasing because of urban migration and the introduction of quality imported products. The extent that such growth in demand for HVP's translates into demand for imports of HVP's largely depends on the country's capacity to locally produce or process HVP's. Trade barriers prevalent for HVP's in East Asia suggest that Governments (except for Hong Kong) are concerned with the employment and income benefits of HVP processing and are committed to some degree of self-sufficiency. Their commitment is evident even when short-run economic advantages, such as economic growth in favored sectors and foreign exchange savings, appear to be outweighed by the slower long-run growth involved in diverting resources from their highest return. Examples include dairy development programs in Korea and Japan, which appear to have negative long-run economic returns, but are justified on equity and food security grounds.

Trade Barriers and Local Producers Influence HVP Imports

Trade barriers in East Asia constrain growth in the quantity of imports. When coupled with lack of indigenous capacity to grow beef, the import barriers lead to comparatively high prices (without retail price subsi-

Table 19.—East Asia imports of fresh, chilled, and frozen meat by country of origin

	Total	Australia	Canada	European Community	Taiwan	Thailand	United States	Other
				Million dollars/(percent)				
Hong Kong								
1977	129.9	16.4	1.5	7.3	—	—	26.9	[1]77.8
	(100.0)	(12.6)	(1.2)	(5.6)	—	—	(20.7)	(59.9)
1982	218.4	21.4	1.5	4.3	0.7	1.0	36.8	[1]152.7
	(100.0)	(9.8)	(0.6)	(2.0)	(0.3)	(0.5)	(16.8)	(69.9)
1983 est.	220.9	10.6	1.9	11.2	—	—	29.3	[1]167.9
	(100.0)	(4.8)	(0.9)	(5.1)	—	—	(13.3)	(76.0)
Japan								
1977	914.5	246.9	117.0	59.0	66.3	7.7	193.2	273.8
	(100.0)	(27.0)	(12.8)	(6.5)	(7.3)		(21.1)	(29.9)
1982	1,636.8	365.9	201.3	81.5	73.6	60.6	536.9	317.0
	(100.0)	(22.4)	(12.3)	(5.0)	(4.5)	(3.7)	(32.8)	(19.4)
1983 est.	1,711.0	367.2	190.8	96.8	122.9	39.5	551.1	342.7
	(100.0)	(21.5)	(11.2)	(5.7)	(7.2)	(2.3)	(32.4)	(20.0)
Korea								
1977	32.3	19.1	—	—	—	—	0.6	[2]12.7
	(100.0)	(59.1)	—	—	—	—	(1.9)	(39.3)
1982	157.8	146.8	—	—	—	—	5.5	[2]5.5
	(100.0)	(93.0)	—	—	—	—	(3.5)	(3.5)
1983 est.	159.7	145.0	—	—	—	—	4.3	[2]10.4
	(100.0)	(90.8)	—	—	—	—	(2.7)	(6.5)
Taiwan								
1977	6.3	4.5	—	—	—	—	1.2	[2]0.6
	(100.0)	(71.5)	—	—	—	—	(19.0)	(9.5)
1982	60.4	49.2	.1	—	—	—	6.3	[2]4.8
	(100.0)	(81.5)	(0.2)	—	—	—	(10.4)	(7.9)
1983 est.	65.6	49.7	—	—	—	—	6.3	[2]9.6
	(100.0)	(75.8)	—	—	—	—	(9.6)	(14.6)
East Asia								
1977	1,083.0	286.9	118.5	66.3	66.3	7.7	221.9	364.9
	(100.0)	(26.5)	(10.9)	(6.1)	(6.1)	(0.1)	(20.5)	(33.7)
1982	2,073.4	583.3	202.9	85.8	74.3	61.6	585.5	480.0
	(100.0)	(28.1)	(9.8)	(4.1)	(3.6)	(3.0)	(28.2)	(23.2)
1983 est.	2,157.2	572.5	192.7	108.0	122.9	39.5	591.0	530.6
	(100.0)	(26.5)	(8.9)	(5.0)	(5.7)	(1.8)	(27.4)	(24.6)

Note: — = None or negligible.

[1]Primarily PRC. [2]New Zealand.

Sources: UN trade data, official country trade statistics, ERS estimates.

dies). Consumption is reduced from what it would have been under free trade. For example, in Japan, South Korea, and Taiwan, trade barriers on beef and many other commodities raise prices, discourage consumption, and constrain the availability of imports to consumers. By contrast, consumers in Hong Kong enjoy relatively low prices for HVP's, partly because the colony erects almost no barriers to imports of agricultural products (except for wine, liquor, tobacco, and cigarettes).

While demand conditions, trade barriers, indigenous production capacity, and domestic price control policies are the primary determinants of consumer prices and HVP import levels, foreign suppliers' pricing policies and competitive situations may play a key role. For example, the PRC's nearness to Hong Kong, and its capacity to produce and willingness to provide high-value unprocessed or semiprocessed agricultural commodities at prices close to the cost of production, provides the colony with a relatively low-cost supply source. In 1983, the PRC supplied frozen chickens to Hong Kong at a 26-percent lower price than the United States, about equaling subsidized offerings from the Netherlands. The PRC's fresh egg and pork prices also undercut U.S. prices by a similar amount. Other examples of suppliers'. offerings that tend to influence prices in East Asia include relatively low-priced beef cuts from Australia and dairy products from New Zealand.

Table 20.—East Asia imports of meat products by commodity

	1977		1982	
	Quantity	Value	Quantity	Value
	1,000 tons	*Million dollars*	*1,000 tons*	*Percent*
Hong Kong				
Beef	15.6	26.7	21.8	53.0
Mutton	2.1	3.0	2.6	5.5
Pork	14.1	21.8	46.6	80.8
Poultry	47.5	46.7	50.8	46.5
Offals & other	24.7	31.9	35.0	32.2
Total	103.9	129.9	156.8	218.4
Japan				
Beef	84.3	135.4	122.0	390.2
Mutton	148.3	180.9	85.1	153.8
Pork	110.0	330.3	141.0	539.4
Poultry	47.6	63.4	105.5	163.4
Offals & other	83.2	204.5	94.8	389.2
Total	525.1	914.5	594.7	1,636.8
Korea				
Beef	8.0	6.8	70.7	148.1
Mutton	30.0	25.1	8.6	9.3
Pork	—	—	.1	.2
Poultry	.1	.1	.1	.2
Offals & other	.3	.3	—	—
Total	38.4	32.3	79.5	157.8
Taiwan				
Beef	3.2	5.3	19.8	51.2
Mutton	.6	.7	6.3	9.2
Pork	—	—	—	—
Poultry	.2	.1	—	—
Offals & other	.2	.1	—	—
Total	4.2	6.3	26.1	60.4
Total				
Beef	111.1	174.2	234.3	642.5
Mutton	181.0	209.7	102.6	177.8
Pork	124.1	352.1	187.7	620.4
Poultry	95.4	110.3	156.4	210.1
Offals & other	108.4	236.8	129.8	421.5
Total	671.6	1,083.3	857.1	2,073.3

Note: — = None or negligible.
Sources: UN trade data and country trade statistics.

HVP Import Patterns In Last 5 Years

Total HVP imports in East Asia reached an estimated $16.2 billion in 1982, 67 percent higher than in 1977. This translates to average annual growth of 13.3 percent between 1977 and 1982, while low-value agricultural imports grew at less than one-half that rate. Japan's HVP imports accounted for about 70 percent of estimated total East Asia imports in 1982; Hong Kong, 18 percent; South Korea, 7 percent; and Taiwan, 5 percent. In Japan and Hong Kong, HVP's comprised 70 to 75 percent of total agricultural imports in each country compared with only 30 to 40 percent in South Korea and Taiwan (tables 15-18). However, HVP import growth rates in the lower per capita income countries, South Korea and Taiwan, were about double those in Japan and Hong Kong. As a result, Japan and Hong Kong's share of regional HVP imports can be expected to decline, perhaps 3 to 5 percent, by the late 1980's.

The most important East Asian HVP imports shown in tables 16-19 include unprocessed commodities such as fish and fresh fruit, semiprocessed commodities such as meat and animal feeds, and highly processed foods such as dry milk, milk, and miscellaneous food preparations. Import demand increased most rapidly for raw furskins, milling byproducts, miscellaneous food preparations, and manufactured tobacco. Among the few HVP imports registering decreases were coffee, eggs, meat and fish meal, and dried and smoked meats. The major suppliers of HVP's to East Asia are the United States, Canada, the EC, and neighboring Asian nations. The United States is particularly dominant in the Japanese and South Korean markets; the PRC is the predominant exporter to Hong Kong. No single supplier dominates the Taiwan HVP market.

Meat Imports Double Despite Trade Barriers And Self-Sufficiency Programs

Meat was second to fresh fish as the most valuable HVP imported in East Asia during 1982. Imports of fresh, chilled, and frozen meats amounted to $2.1 billion in 1982, nearly double the 1977 level (table 19). At the same time, volume grew nearly 28 percent, or 5.5. percent annually, to nearly 860,000 tons (table 20). Beef imports, because of their relatively high income elasticity, accounted for about two-thirds of the increase in volume of imported meats, despite sharp price increases for beef compared with pork and poultry during the period.

Unlike beef operations, technically efficient domestic swine and poultry operations are advancing output at close to the pace of growth in demand, easing East Asia's import requirements for pork and poultry. This is also true in Hong Kong, despite its space limitations. Beef production must be heavily subsidized to be profitable to farmers. But despite its high cost, beef production has been promoted in Japan and South Korea, because of self-sufficiency programs justified on the basis of rural welfare and food security.

The increase in East Asian imports of meat, especially beef, indicates that consumers have substantially upgraded (added more protein) and diversified (included

more beef in) their diets between 1977 and 1982. The relatively low per capita meat consumption, averaging 22.9 kgs. in East Asia compared with 100 kgs. in the United States, suggests little slackening of growth in consumption, and hence imports, in the remainder of the 1980's.

Available studies indicate that income elasticities with respect to various meats range from +0.4 to +3.0 in East Asia. The implied income elasticity of demand of about +1.2 for all meat imports between 1977 and 1982 appears to be consistent with these studies. Therefore, strong GNP growth of 4.5 percent or more a year, as is projected for East Asia in the 1980's, should translate into annual growth in the volume of meat imports of over 5 percent.

Japan is by far the largest importer of meat in East Asia, taking over $1.6 billion in 1982. Taiwan, though a significant net exporter of pork products, imported beef valued at $60 million in 1983, 10 times the 1977 level. Australia and the United States together share over half the market.

The United States supplies the fast-growing, high-quality segment of the beef market at prices about 20 percent higher than Australia. The rapid expansion in specialized U.S.-Japan trade in diaphragm beef (which is not subject to quality controls and variable levies) used as re-formed steaks or barbecue beef, accounted for about one-fourth of the increase in volume of U.S. beef exports to Japan between 1977 and 1982. Coupled with Japan's MTN commitment to increase grain-fed beef imports, this has increased the U.S. share of the Japanese market for imports of all types of beef from 23.1 percent (volume) in 1977 to 42.4 percent in 1982. The United States is also the leading supplier of poultry meat and the third leading supplier of pork to East Asia, after the PRC and Canada. As a result, the United States has been successful in boosting its value share of East Asia's meat market to 28.2 percent in 1982, up from 20.5 percent in 1977 (table 19). Among the major suppliers, only China also achieved a significant gain in market share, principally because of its proximity to Hong Kong.

The United States will likely improve its market share further in the late 1980's as East Asians continue to

Table 21.—East Asia imports of fresh fruits and fresh or dry nuts, by country of origin

	Total	India	Philip-pines	PRC	Taiwan	Thailand	United States	Other
				Million dollars/(percent)				
Hong Kong								
1977	162.2	2.3	3.7	43.8	7.3	6.7	73.9	24.5
	(100.0)	(1.4)	(2.3)	(27.0)	(4.6)	(4.1)	(45.6)	(15.1)
1982	270.5	4.2	11.1	72.2	9.7	18.7	114.6	40.0
	(100.0)	(1.6)	(4.1)	(26.7)	(3.6)	(6.9)	(42.4)	(14.8)
1983 est.	258.1	2.4	11.7	63.5	15.3	14.5	119.9	30.8
	(100.0)	(0.9)	(4.5)	(24.6)	(5.9)	(5.6)	(46.5)	(11.9)
Japan								
1977	420.3	14.6	153.1	27.3	47.0	5.9	167.1	5.3
	(100.0)	(3.5)	(36.4)	(6.5)	(11.2)	(1.4)	(39.8)	(1.3)
1982	800.6	9.3	242.6	36.8	46.1	6.5	366.1	93.2
	(100.0)	(1.2)	(30.3)	(4.6)	(5.8)	(0.8)	(45.7)	(11.6)
1983 est.	824.0	10.0	230.8	46.0	43.8	1.0	378.5	113.9
	(100.0)	(1.2)	(28.2)	(5.6)	(5.3)	(0.9)	(46.2)	(13.8)
Korea								
1977	1.9	—	0.2	—	0.7	0.1	—	0.9
	(100.0)	—	(10.5)	—	(36.8)	(4.3)	—	(47.4)
1982	10.6	—	0.8	—	0.7	—	5.3	3.8
	(100.0)	—	(7.5)	—	(6.6)	—	(50.0)	(35.8)
1983 est.	9.9	—	0.5	—	0.91	—	4.5	4.0
	(100.0)	—	(5.1)	—	(9.1)	—	(45.5)	(40.4)
Taiwan								
1977	8.5	0.1	0.7	—	—	—	2.8	4.9
	(100.0)	(1.2)	(8.2)	—	—	—	(32.9)	(57.6)
1982	48.1	2.6	1.2	—	—	0.2	30.0	14.1
	(100.0)	(5.4)	(2.5)	—	—	(0.4)	(62.4)	(29.3)
1983 est.	51.2	0.6	1.7	—	—	0.1	35.4	23.4
	(100.0)	(1.2)	(3.3)	—	—	(0.2)	(69.5)	(26.2)
East Asia								
1977	592.9	17.0	157.7	71.1	55.0	12.7	243.8	34.2
	(100.0)	(2.9)	(26.6)	(12.0)	(9.3)	(2.1)	(41.1)	(5.8)
1982	1,129.8	16.1	255.7	109.0	56.5	25.4	516.0	151.1
	(100.0)	(1.4)	(22.6)	(9.6)	(5.0)	(2.2)	(45.7)	(13.4)
1983 est.	1,143.2	13.0	244.7	109.5	60.0	15.6	538.3	162.1
	(100.0)	(1.1)	(21.4)	(9.6)	(5.2)	(1.4)	(47.1)	(14.2)

Note: — = None or negligible.

Sources: UN trade data, official country trade statistics, ERS estimates.

upgrade and diversify protein sources in their diets. However, given the commitment to domestic livestock development in Japan, imports will undoubtedly be carefully controlled by quotas, tariffs, and nontariff barriers, holding import growth at the 1977-82 pace of 2.7 percent a year. Particularly rapid growth in total meat imports is likely in South Korea and Taiwan because of the relatively low level of meat consumption and expected high growth rates of GNP. Smaller exporters are likely to make further inroads in the East Asian market as they take advantage either of lower costs or of proximity. Taiwan, for example, is likely to become even more competitive in the pork trade, and Brazil and Thailand, in poultry. The PRC is likely to become even more important in the Hong Kong market as it improves the quality of livestock products from operations in nearby Guandong province. *[Richard F. Nehring, 202 447-8230]*

Japan's Grain Prospects

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Abstract: According to preliminary results of ERS research, Japan will import 30 million tons of coarse grains (20 million from the United States), and 5.4 million tons of wheat (3 million from the United States) in 1990. Japanese domestic supply and demand for rice will be in balance. These projections are based upon assumed levels of Japanese income, population, farm and import prices for grains, and upon a model that transforms these assumptions into their implications for supply, demand, and trade.

Keywords: Japan, model, projections, agricultural trade, food, feed, corn, coarse grains, rice, wheat.

Japan will import 30 million tons of coarse grains and 5.4 million tons of wheat in 1990 according to preliminary results of ERS research. Of that trade, about 20 million tons of coarse grains and 3 million tons of wheat should come from the United States, though the precise U.S. share will depend on unpredictable events, like the weather here and abroad. Japanese rice production and demand are projected to be nearly in balance in 1990, with only a small amount imported (about 33,000 tons).

These projections are based upon two things. First is a set of assumptions concerning future Japanese population, income, and agricultural policies, as well as future U.S. export prices for coarse grains. Second, a Japanese Grains Model now under development at ERS is used to translate the assumptions into their implications for supply, demand, and trade (calculated as the difference between supply and demand). Different assumptions about agricultural policies would have only a small effect on projected trade, because not much rice is likely to be traded in any case, and because the production of all other grains meets only a small part of Japanese demand.

Key Assumptions

Assumptions for population and income have the most influence on the estimates for future trade. The assumptions about Japanese agricultural policies call for implementation of Japan's announced long-term goals of reducing rice production, increasing wheat and barley production, and eliminating subsidies to export rice or to use it as feed. If anything, the assumptions used here may overstate the Government's will to achieve its targets.

Population—Japanese population in 1990 is assumed to be 126.3 million, following official Japanese projections.

Income—Income is measured as the GNP, adjusted for inflation. Real income per capita is projected to be 36 percent higher in 1990 than it was in 1978.

Trade prices—The price of corn (f.o.b. U.S. Gulf ports), converted into japanese yen and adjusted for inflation, is assumed to be 74 percent as high in 1990 as it was in 1979. The price of sorghum, similarly measured, is assumed to be 76 percent as high. These price assumtions are consistent with other ERS long-term projection work on world agricultural trade.

Japanese supply prices—These projections are based on the assumption that the Government's purchase price for rice (after adjustment for inflation) will fall 2 percent a year between 1979 and 1990, while the real purchase prices for wheat and barley will rise 3 percent a year. This policy mix would represent a very strong commitment to the long-term goals announced by the Japan's MAFF, because the assumed decline in real rice support prices might be too disruptive to be politically acceptable, and because the increase in wheat and barley prices might be too large to be economically acceptable.

Rice subsidies—In recent years, Japan has reduced Government stockpiles of rice by subsidizing its use as

Table 22.—Projected grain statistics for Japan, 1990

Grain	Yield	Area	Domestic supply	Seed	Supply net of seed	Food	Feed	Change in stocks	Net imports
	Tons/ha	*1,000 ha*				*1,000 tons*			
Rice	5.60	1,746	9,778	73	9,705	9,716	6	+16	33
Wheat	4.44	154	684	27	657	5,600	485	0	5,428
Barley	4.10	115	471	12	459	1,897	NA	0	NA
Corn	NA	NA	NA	NA	0	3,891	13,551	0	17,442
Other grain	NA	NA	NA	NA	9	196	NA	0	NA
Barley plus other grain	NA	NA	NA	NA	468	2,093	10,630	0	12,255

Notes: "NA" means not available. Zero means less than 500 tons. All statistics are on a Japanese (April/March) fiscal-year basis. "Other grain" is all grains minus rice, wheat, barley, and corn. "Barley plus other grain" in this table is synonymous with "other coarse grains" in the text. The "Food" category in this table is broadly defined as the sum of the Japanese food balance sheet entries for gross food, industrial use, and waste.

Source: ERS estimates.

feed and by subsidizing exports. The Government wishes to avoid such measures in the future, because they are costly at home and cause frictions with trading partners abroad. These projections assume that in future years no rice will be subsidized for feed or exports.

From Assumptions to Estimates

The assumptions are transformed by the model into estimated feed demand, food demand, production net of seed, changes in stocks, and net trade (all shown in table 22).

Feed demand—Feed grains (mainly corn and sorghum) dominate Japan's cereal imports. The combination of larger population, higher income, and lower trade prices presumed for 1990 causes estimated total feed grain consumption to rise to nearly 25 million tons. According to the elasticities estimated in the model, a 1-percent increase in feed grain consumption would be induced by a 1-percent increase in population or per capita income, or a 5-percent drop in the average import price of corn and sorghum from the assumed levels. It is projected that a continuing downward trend will reduce the share of wheat to 2 percent of total feed grains in 1990. Without Government subsidies, only a small amount of substandard rice—about 6,000 tons—will be used as feed. Finally, it is estimated that 56 percent of coarse grain feed demand will be met by corn, and 44 percent by other coarse grains. This projection suggests little change in the current pattern of use and is based on the assumption that there will be little change in the ratio of the trade price of corn to the trade price of sorghum over the decade.

Food demand—Per capita rice food consumption has been steadily decreasing 2 percent a year. This trend is expected to continue at least through 1990. Per capita wheat food consumption is expected to remain constant at its average level during a 1966-79 base period. Barley food usage falls into two quite different categories. Its use in industry (primarily for brewing) is expected to continue to grow at an annual rate of 5.8 percent per capita. In contrast, other food use of barley is expected to decline as income rises. Corn food demand comes almost entirely from industry—to make products like corn starch and corn sweeteners. It is projected that the very rapid growth rate of corn consumption will gradually decelerate during future years, until per capita corn food consumption attains a plateau in 1994. Finally, it is anticipated that food consumption of other grains is anticipated to grow at an annual rate of 3.7 percent per capita (from a very small base).

Yields—Rice yields are projected to continue rising 1.3 percent a year. Changes in wheat and barley yields have tended to follow changes in prices (after a 1-year lag). It is estimated that each year's assumed 3-percent price increase will cause wheat yields to rise nearly 3 percent and barley yields to rise nearly 2 percent in the following year (switching riceland to wheat and barley allows for rapid growth in average yields).

Areas—The model results indicate that the gross total area cultivated will fall from 5.66 million hectares in 1978 to 4.66 million hectares in 1990. This is based on factors such as increased population pressure on farmland, increased possibilities for off-farm earnings, and the assumed decline in the average real price for grains (because the rice area affected by assumed falling prices is far larger than the wheat and barley areas affected by assumed rising prices).

The share of rice in the total area is projected to decline from an actual level of 45 percent in 1978 to 37 percent in 1990, because of falling rice prices and rising wheat and barley prices. These price changes also will increase the share of the nonrice area planted to wheat and barley, from 6.7 percent in 1978 to 9.2 percent in 1990. According to the simulations done with the model, however, the area planted to wheat and barley will decline in the late 1980's, presumably in favor of less labor-intensive forage crops.

Production and seed usage—Predicted production equals predicted area times predicted yield. Seed usage of each crop is estimated as a constant fraction of production. For coarse grains other than barley, continuance of present trends would cause both production and seed use to be near zero in 1990.

Changes in stocks—If the price policies assumed for these projections are adopted, Japan should achieve its long-term goal of getting rice production in 1990 down to vir-

tual equality with total market demand, so that any changes in stocks would be trivial. Changes in stocks of grains other than rice depend mainly on unpredictable short-term phenomena (like weather). The best that can be done is to assume that positive and negative changes in stocks will average to zero.

Net trade—For rice, the policy of no subsidies implies there will be no exports. It is likely that a small amount of specialty rice will continue to be imported—perhaps 33,000 tons (the average annual imports between 1969 and 1979).

For nonrice grains, net imports are calculated as the sum of seed, feed, and food use, minus production (with changes in stocks assumed to be zero). Thus, wheat imports are estimated at 5.4 million tons, corn imports at 17.4 million tons, and other coarse grain imports at 12.3 million tons.

Comparison With Official Japanese Projections

The Japanese Government has also prepared a set of projections for 1990. These MAFF projections, and a report on policies to implement them, form the contents of the December 1980 and March 1983 issues of Japan's Agricultural Review (published for MAFF by the Association for International Cooperation of Agriculture and Forestry, 19 Ichiban-cho, Chiyoda-ku, Tokyo).

The MAFF and ERS projections feature similar estimates for food grain demand in 1990. Both sets of estimates are based on the same population projections. However, the assumed rates of income growth are different. MAFF measures income as the Private Final Consumption Expenditures (PFCE) component of GNP. It projects that real PFCE per capita will be 46 to 64 percent higher in 1990 than it was in 1978. In the ERS model, the entire GNP is used as the measure of income. In light of recent years of slow economic growth, the ERS projections indicate that real GNP per capita will be only 36 percent higher in 1990 than it was in 1978. Because Japanese food demand for grains depends much more on total population than on income per person, both projections of demand are similar, despite their substantial disagreement on prospects for income growth.

The MAFF projections are rather vague about demand for feed grains. Without specifying crops, they estimate imports of 17.35 million tons of "condensed feed" in 1990 "based on total digestible nutrition [TDN]." Assuming that this condensed feed is coarse grains with an 80-percent TDN content, the MAFF estimate translates into 21.7 million tons of coarse grains imported for feed. Because Japan produces an extremely small amount of feed-quality coarse grains, the projected feed demand practically equals the projected feed imports of 21.7 million tons. The ERS projections show a somewhat larger feed demand for coarse grains: about 24.2 million tons. Underlying these similar estimates are radically different methods for deriving feed demand.

MAFF follows what might be termed a prescriptive approach. Japanese food consumption is assumed to remain at a healthy 2,500 calories per person per day between 1978 and 1990, far below the amount typical for countries with Japan's per capita income in 1978 (let alone MAFF's projected 1990 income). Fat is to be limited to about 30 percent of total calories, in accordance with the "Recommended Dietary Allowances for Japanese" published in August 1979 by the Health and Welfare Ministry. Fish will continue to supply at least 46 percent, by weight, of animal protein. Within these constraints—all of which tend to reduce feed requirements—demands for specific animal products are projected. MAFF assumes that domestic production will meet 89 to 99 percent of the demand for eggs, dairy products, poultry meat, and pork, as well as 71 percent of the demand for beef. Feed demand is then estimated as the projected domestic supply of animal products multiplied by projected feed-conversion rates.

The ERS method of estimating future feed demand is more direct than MAFF's approach, and is descriptive rather than prescriptive. The historical relationships between feed demand, per capita income, and the prices of feed grains were measured over a base period from 1965 to 1979. These relationships (income and price elasticities) are projected to remain stable through 1990.

According to the ERS estimates, food demand for coarse grains will be close to 6 million tons in 1990 (mostly for manufactured products like beer, corn starch, and corn sweeteners). MAFF's projections do not mention future food demand for coarse grains.

On the supply side, the ERS projections are more optimistic than MAFF about the growth rates of yields. However, MAFF predicts larger areas. For Japan's most important crop, rice, both projections show a combination of area and yield that brings supply down to virtual equality with demand in 1990. MAFF assumes this result directly, whereas the ERS projections assume a price policy that evokes a supply-demand balance. In other words, the ERS projections estimate a set of prices that would achieve the Japanese goal of eliminating surplus rice production under average weather by 1990. With regard to wheat, the ERS projections fall far below MAFF's targets of tripled area and more than tripled production. Even so, the ERS projections show wheat production nearly doubling between 1978 and 1990. The ERS projections also fall short of MAFF's less ambitious targets for barley.

A basic strategy advocated by MAFF is to consolidate Japanese farms into larger, more efficient operational units. It is difficult to simulate the effects of such a policy with the ERS model. But the direction of change can be gauged. The great majority of Japanese farm households receive most of their income from off-farm employment. Over the period 1965 to 1979, farmers responded to the improved off-farm job opportunities associated with rising per capita income by reducing the total area planted, by planting much more of the remaining land to labor-saving fodder crops, and by planting much less land to relatively labor-intensive wheat and barley. The operators of the larger farms created under the land-consolidation policy would receive a smaller portion of their income from off-farm employment, and therefore would be less sensitive to off-farm income opportunities. Thus, the policy may raise the cultivated area in general, and the wheat and barley areas in particular, above the levels predicted here. In any case, Japanese farm families are likely to remain sensitive to off-farm earnings for many years to come. Even under the MAFF projections, the "core farm households" (defined as those farm

households with all men from the age 16 to 60 working 150 days or longer annually in self-employed farming) will occupy only about 60 percent of the total cultivated area in 1990, compared with a little less than 50 percent in 1980.

Implications for the United States

The estimates generated by ERS are for total Japanese imports in each grain category—they do not specify the country of origin. However, one can assume that the U.S. share of this trade will be similar to that of recent years: Roughly two-thirds of coarse grains, and a little less than three-fifths of wheat. As mentioned previously, this implies coarse grain exports to Japan of about 20 million tons and wheat exports of about 3 million tons. Another implication of these projections is that the Japanese can achieve their goal of eliminating surplus rice production with normal weather by 1990. This will remove pressure to dump burdensome Government stockpiles of rice as subsidized feed, which displaces U.S. exports of corn and sorghum to Japan, or to dump surplus rice as subsidized exports, which displaces U.S. exports of rice to other countries. [*Michael Lopez, 202 447-8229*]

South Korea: An Export Market Profile[1]

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Abstract: Income growth in South Korea will shift consumer demand from cereals toward meats and milk in the 1980's. The result will be strong growth in imports of U.S. feed grains and soybeans, and slower growth in imports of U.S. rice and wheat. Protectionism and growing competition in world textile markets may cause imports of raw cotton to decline.

Keywords: South Korea, agriculture, imports, exports, feed grains, wheat, rice, cotton, livestock.

In the early 1960's, the Republic of Korea (South Korea) embarked on an export-oriented development program, which has helped transform the country from one of the world's poorest nations into a prosperous middle-income country with a major role in world trade in light manufactures. Real gross national income increased at an average rate of 8.5 percent a year between 1962 and 1981, a record of sustained growth rivaled by few nations. One result of this spectacular growth record has been greatly increased demand for food grains, especially rice and wheat, and more recently for meats, milk, and eggs. A densely populated, mountainous country, South Korea has in recent years been unable to produce sufficient quantities of rice to satisfy consumer demand (wheat production is very limited in relation to consumption), while demand from the livestock sector for feed grains and protein meals has far outgrown the nation's limited capacity to produce them. As a result, South Korea has turned to the United States and other foreign producers for supplies of foods and feeds. Meanwhile, several of Korea's leading export industries, notably cotton textiles and garments and leather garments and footwear, rely heavily on imported agricultural raw materials.

The U.S. share of South Korea's agricultural imports averaged 65 percent during 1979-83. Korea purchased $1.84 billion of U.S. agricultural products in 1983, making it the fifth leading U.S. market for such products. Raw cotton, feed grains (corn and sorghum), wheat, cattle hides, soybeans, and rice together accounted for nearly 92 percent of the total value of U.S. agricultural exports to South Korea in 1982. Continued growth in population and in per capita real income is likely to raise total South Korean agricultural imports from $3 billion in 1983 to $5 billion in 1990 (in 1983 dollars). Market development efforts can help the United States to maintain or raise its current market share in major import commodities, and thus to receive most of this increased import demand.

Feeds Will Dominate Agricultural Import Growth

Most of the growth in South Korea's agricultural imports through 1990 will consist of feedstuffs rather than foods or agricultural raw materials. For all three groups, growth in demand will far outweigh changes in domestic supply in determining future import trends. Land resources are already intensively used, and there is little chance of raising production by expanding cultivated area. Any growth in future crop production will come only slowly through yield increases and reallocation of land among crops. Total food imports will grow rather slowly: Per capita consumption of wheat and rice has

[1]Foreign agricultural economic report to be published, by John H. Dyck, ERS, 1984.

probably peaked, and future imports will depend mainly on population growth. Income growth will have a stronger effect on demand for other foods, but Government policy is likely to limit the extent to which this is satisfied by increased imports. Imports of agricultural raw materials face mixed prospects, depending on the scope for expanding exports of the finished products based on these materials. On the other hand, demand for animal products will increase rapidly in response to growth in real income and to changes in tastes resulting from urbanization and other demographic trends. Consumer demand for these products will be translated into expanded imports of feed grains, oilseeds, and other protein feed sources.

Bright Prospects For Future Income Growth

South Korea's real income is likely to continue growing rapidly in the 1980's, although somewhat more slowly than in the past. The nation is in the process of transforming itself from a supplier of light manufactures into an exporter of heavy industrial goods, especially steel and ships. In the later 1980's, electronic products (including computer equipment) and other high-technology products are expected to assume the lead in export growth. Because of its highly export-oriented growth strategy, South Korea is vulnerable to fluctuations in world trade, and especially to protectionist policies in the developed countries. Still, official projections of 7.5-percent annual real growth appear realistic, and are adopted as the basis of this study's import projections. Other factors also point to continued growth in agricultural import demand. Urbanization is increasing rapidly as industrial growth draws workers into the cities, where they are exposed to new food products rare or absent in the rural diet, including meats, milk, and sugar products. Population growth, though gradually slowing over time, is expected to average at least 1.5 percent annually through the 1980's.

Consumption Of Meats Low But Rising

Growth in imports of feed grains and meal sources will depend on the balance between the domestic supply and demand for feeds. Feed demand will depend, in turn, on growth in demand for livestock products, on the extent to which this demand is met by domestic production rather than by imports, and on trends in feed-conversion rates. Current per capita consumption of all animal products is rather low, at 4.1 kgs. of beef, 6.7 kgs. of pork, 2.8 kgs. of chicken meat, 7.3 kgs. of eggs, and 16.5 kgs. of milk in 1983. Korean consumers have traditionally prized beef over pork, chicken meat, and eggs, and in the absence of constraints, would channel higher real income strongly toward increased beef consumption.

However, South Korea has limited potential for increasing area devoted to pasture and to fodder crops, and this may severely constrain the growth of domestic beef production. Much of the growth in demand will have to be satisfied through expanded beef imports. No such resource constraints limit domestic production of pork, chicken meat, or eggs, which should keep pace with any foreseeable growth in consumer demand. Growth in production of chicken meat is expected to be especially rapid (11.2 percent a year, 1983-90), followed by eggs and pork (8.0 and 6.4 percent, respectively). Demand for milk has grown very rapidly since the 1960's, and dairy production will be increasingly important in the total demand for feedstuffs.

Changes in feed-conversion rates are expected to play a major role in determining the growth of Korea's feed imports in the 1980's. Feeding efficiency in poultry and egg production, currently the largest user of animal feeds, is projected to increase dramatically in the 1980's as Korean poultry producers learn to imitate foreign production techniques. The resulting drop in the feed-conversion rate is expected to offset a large share of the expected increase in poultry and egg production. The rate in beef production is expected to rise as farmers turn increasingly to concentrate feeding. The conversion rate in milk production has been relatively stable in recent years, and the average rate for 1977-83 is assumed to continue through the 1980's. Finally, the feed-conversion rate for pork is assumed to remain at its 1983 level. While total output of livestock products is projected to rise 95 percent between 1983 and 1990, changes in the composition of production and in conversion rates are projected to reduce the increase in feed demand to 48 percent. However, a slower rise in feeding efficiency in the poultry and egg industry, or a shift by dairy farmers to grain feeding, could raise this projection sharply.

In contrast to the relatively rapid growth in feed demand projected in this study, Korean production of feed grains and vegetable protein meals is expected to rise very little through 1990, because of competition for scarce land resources from other crops. Only fishmeal appears to have much growth potential, and fishmeal is fed almost entirely to broilers and layers. As a result, Korea's imports of feed grains and sources of vegetable protein meal will grow rapidly between 1983 and 1990 (table 23). The United States may continue to capture 90 percent or more of the Korean feed grain market for the foreseeable future, even without additional marketing efforts. But careful attention to market needs could help secure close to 100 percent of this market in most years. U.S. soybeans and soybean meal should be able to hold their present (59 percent) share of Korea's protein meal supply through continued market development and competitive pricing. However, if meal demand continues to outgrow that for soybean oil, South Korea may expand its imports of meals, especially Brazilian soybean meal.

Wheat and Rice Dominate Imports of U.S. Foods

Wheat is by far South Korea's leading food import. About 1.97 million tons of wheat—97 percent of the nation's total supply—were imported in 1982, almost exclusively from the United States. Wheat flour is used in making noodles, breads, and pastries, alcoholic beverages, various processed foods, and glue for plywood. Current trends suggest that wheat consumption per person is unlikely to increase in the 1980's, and may decline. Imports are projected to grow 1.6 percent yearly between 1983 and 1990, reflecting population growth and declining domestic production. Whereas the United States has been the sole source of South Korea's wheat imports in the past, it faces potential competition from Canada and Australia now that individual flour mills are permitted to arrange their own wheat imports.

Table 23.—South Korea's major agricultural imports, 1983, and projections for 1990

Commodity	Imports 1983	Projected imports 1990	Annual growth rate
	1,000 tons		*Percent*
Rice	221	770	19.5
Wheat	1,950	2,175	1.6
Corn for processing	540	950	8.4
Feed grains			
High[1]	2,895	5,678	10.1
Low[1]	2,895	4,662	7.0
Oilseeds[2]			
High[1]	622	1,060	7.9
Low[1]	622	885	5.2
Raw cotton	333	386	2.1
Cattle hides	135	168	3.2

[1]"High" import projections based on assumption that feed-conversion rates remain at 1982 levels. "Low" projections based on assumed changes in feed-conversion rates during the 1980's (see text). [2]Includes imported soybeans converted to meal-equivalent basis.

Source: *South Korea: An Export Market Profile.*

Prospects for U.S. export growth are somewhat brighter for rice. Rice plays a central role in South Korea's agricultural sector, accounting for 39 percent of agricultural output by value. Per capita consumption is among the highest in the world. Current trends suggest that rice imports will grow rapidly in the 1980's, a development that should benefit the United States. Per capita consumption appears to have reached a plateau, and will at most remain constant through 1990; demand growth will result entirely from population growth. On the other hand, production is likely to slip gradually behind consumption during this period. The Government incurs heavy expenditures providing farmers with input and output price subsidies to raise production and farm income, and is unlikely to increase these in real terms. Yields are already very high, and production increases will depend primarily on expanding the share of riceland under HYV's. However, Government efforts to expand HYV area have had very mixed results because of consumer preferences for traditional varieties and the susceptibility of the HYV's to weather-related yield problems. Korean rice imports are projected to grow from 221,000 tons in 1983 to 720,000 tons in 1990. California rice is highly prized by consumers, and the U.S. share in the import market may ultimately be limited by the availability of California rice.

Around 500,000 tons of imported corn are currently processed into food products, especially HFCS. Growth in HFCS production should help boost imports of corn for processing to 1 million tons in 1990.

The competitive price of its range-fed beef has helped Australia monopolize the Korean Government's sizeable imports of beef for sale in the domestic market; these imports totaled 70,000 tons in 1982. On the other hand, the United States holds the small market for high-quality beef sold (by Government decree) only in tourist hotels and restaurants. This trade should expand in the 1980's, especially in 1986 and 1988 when Seoul hosts the Asian Games and the summer Olympics.

Imports of a wide variety of other foods, including many fruits, vegetables, and processed foods, are tightly restricted by Government policy aimed primarily at restraining persistent trade deficits. Many such items could have growth potential in the absence of such restrictions, which might eventually be relaxed in response to an improved trade balance. However, growth in this area should probably be regarded as a minor element in future growth in U.S. agricultural exports to South Korea.

Export Growth Determines Cotton, Hide Imports

Imports of agricultural raw materials from the United States, notably cotton and cattle hides, are generally bought by industries selling a large share of their finished products in foreign markets. Korea's imports of these raw materials therefore depend mainly on changes in export demand for these finished products, rather than on growth in population and real income at home. Korea's export sales have an especially strong impact on its imports of raw cotton, presently its leading agricultural import from the United States in value.

Growing protectionism in Korea's traditional developed-country export markets for cotton yarns, textiles, and garments threatens to severely limit or reverse export growth in these markets. Korea may have to make intensive efforts to develop new markets in middle- and low-income developing countries to maintain positive export growth. In the late 1980's, competition from other exporters of cotton textiles and garments is likely to slow South Korea's export growth even further. Growth in the domestic clothing market will boost Korea's imports of raw cotton in the 1980's, but will not be sufficient to continue the rapid growth in cotton imports seen during the 1970's. The United States should be able to maintain a 90-percent share of South Korea's cotton market by continued large credit guarantees and credit allocations, and by continued promotion of the quality and availability of U.S. cotton.

South Korea was the second leading market for U.S. cattle hides and leather in 1982. Hides are used to make leather for garments, footwear, and gloves—all of which are heavily dependent on export markets. Protectionist barriers to these products are currently much less severe than those facing textiles and garments, and exports are expected to grow steadily in the 1980's. South Korea's hide imports should grow 3 percent annually, while growth in imports of U.S. hides will be only slightly lower. On the other hand, Korea imports over 60 percent of its finished leather from Japan, with much of this produced from hides of U.S. origin. The United States could further benefit from the hide and leather trade by learning to duplicate Japanese tanning techniques and by using these techniques to encroach on Japan's share of Korean leather imports. Such a development would, however, lead to an apparent drop in U.S. agricultural exports, because leather is not classified as an agricultural product. [*Donald A. Sillers (202) 447-8229*]

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12	World Supply & Demand
14	Fruit
21	Dairy
22	Rice

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10	World Supply & Demand
24	World Supply & Demand
25	Inputs
26	Oil Crops
27	Vegetables

May

2	Agricultural Outlook
3	Livestock & Poultry
10	World Supply & Demand
16	Wheat
17	Exports
23	Farm Real Estate
24	Cotton & Wool
25	World Agriculture
31	Agricultural Outlook

June

6	Sugar & Sweetener
7	Tobacco
12	World Supply & Demand
20	Dairy
22	World Supply & Demand